

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	nAPP2307235324
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Caza Operating, LLC	OGRID:
Contact Name: Kevin Garrett	Contact Telephone: (432) 556-8508
Contact email: kgarrett@cazapetro.com	Incident # (assigned by OCD): nAPP2307235324
Contact mailing address: 200 N. Loraine, Suite 1550 Midland, TX 79701	

Location of Release Source

Latitude 32.556105 Longitude -103.497985
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Igloo 19 CTB	Site Type: Production
Date Release Discovered: 11/10/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
K	19	20S	35E	Lea County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: S&S Inc.)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 8 bbls	Volume Recovered (bbls): 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

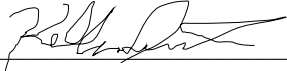
Cause of Release: **H2S Corrosion of Pipeline**

Incident ID	nAPP2307235324
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<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kellan Smith</u> Title: <u>Staff Scientist</u>	
Signature: <u></u>	Date: <u>3/13/2022</u>
email: <u>ksmith@ntglobal.com</u>	Telephone: <u>(580) 682-1889</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>03/14/2023</u>

Incident ID	nAPP2307235324
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>Unknown</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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	nAPP2307235324
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Printed Name: Kellan Smith Title: Staff Scientist

Signature:  Date: 4/17/23

email: ksmith@ntglobal.com Telephone: (580) 682-1889

OCD Only

Received by: Jocelyn Harimon Date: 04/18/2023

Incident ID	nAPP2307235324
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Remediation Plan


Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Kellan Smith Title: Staff Scientist
Signature:  Date: 4/17/23
email: ksmith@ntglobal.com Telephone: (580) 682-1889

OCD Only

Received by: Jocelyn Harimon Date: 04/18/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

Incident ID	nAPP2307235324
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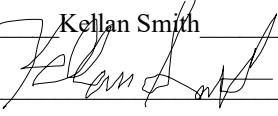
Closure

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: Keilan Smith Title: Staff Scientist
Signature:  Date: 04/18/2023
email: ksmith@ntglobal.com Telephone: (580) 682-1889

OCD Only

Received by: Jocelyn Harimon Date: 04/18/2023

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

Closure Approved by:  Date: 05/16/2023
Printed Name: Jennifer Nobui Title: Environmental Specialist A

***** LIQUID SPILLS - VOLUME CALCULATIONS *****

Location of spill: Igloo 19 CTB

Date of Spill: 10-Nov-2022

If the leak/spill is associated with production equipment, i.e. - wellhead, stuffing box, flowline, tank battery, production vessel, transfer pump, or storage tank place an "X" here: ☒

Input Data:

If spill volumes from measurement, i.e. metering, tank volumes, etc. are known enter the volumes here: OIL: 0.0 BBL WATER: 8.0 BBL

If "known" spill volumes are given, input data for the following "Area Calculations" is optional. The above will override the calculated volumes.

Total Area Calculations						Standing Liquid Calculations					
Total Surface Area	width	length	wet soil depth	oil (%)		Standing Liquid Area	width	length	liquid depth	oil (%)	
Rectangle Area #1	80 ft	50 ft	X	84.00 in	0%	Rectangle Area #1	0 ft X	0 ft X	0 in	0%	
Rectangle Area #2	0 ft	0 ft	X	0.0 in	0%	Rectangle Area #2	0 ft X	0 ft X	0 in	0%	
Rectangle Area #3	0 ft	0 ft	X	0 in	0%	Rectangle Area #3	0 ft X	0 ft X	0 in	0%	
Rectangle Area #4	0 ft	0 ft	X	0 in	0%	Rectangle Area #4	0 ft X	0 ft X	0 in	0%	
Rectangle Area #5	0 ft	0 ft	X	0 in	0%	Rectangle Area #5	0 ft X	0 ft X	0 in	0%	
Rectangle Area #6	0 ft	0 ft	X	0 in	0%	Rectangle Area #6	0 ft X	0 ft X	0 in	0%	
Rectangle Area #7	0 ft	0 ft	X	0 in	0%	Rectangle Area #7	0 ft X	0 ft X	0 in	0%	
Rectangle Area #8	0 ft	0 ft	X	0 in	0%	Rectangle Area #8	0 ft X	0 ft X	0 in	0%	

okay

production system leak - DAILY PRODUCTION DATA REQUIRED

Average Daily Production: Oil 0 BBL Water 0 BBL 0 Gas (MCFD)

Total Hydrocarbon Content in gas: 0% (percentage)

Did leak occur before the separator?: ☒ YES ☒ N/A (place an "X")

H2S Content in Produced Gas: 0 PPM

H2S Content in Tank Vapors: 0 PPM

Amount of Free Liquid Recovered: 0 BBL

okay

Percentage of Oil in Free Liquid Recovered: 0% (percentage)

Liquid holding factor *: 0.08 gal per gal

Use the following when the spill wets the grains of the soil:

* Sand = 0.08 gallon (gal.) liquid per gal. volume of soil.

* Gravelly (caliche) loam = 0.14 gal. liquid per gal. volume of soil.

* Sandy clay loam soil = 0.14 gal liquid per gal. volume of soil.

* Clay loam = 0.16 gal. liquid per gal. volume of soil.

Use the following when the liquid completely fills the pore space of the soil:

Occurs when the spill soaked soil is contained by barriers, natural (or not).

* Clay loam = 0.20 gal. liquid per gal. volume of soil.

* Gravelly (caliche) loam = 0.25 gal. liquid per gal. volume of soil.

* Sandy loam = 0.5 gal. liquid per gal. volume of soil.

Total Solid/Liquid Volume: 4,000 sq. ft. 28,000 cu. ft. cu. ft.

Total Free Liquid Volume: sq. ft. cu. ft. cu. ft.

Estimated Volumes Spilled

Liquid in Soil: 8.0 BBL H2O 0.0 BBL OIL
Free Liquid: 0.0 BBL 0.0 BBL
Totals: 8.0 BBL 0.0 BBL

Total Liquid Spill Liquid: 8 BBL 0 BBL

Recovered Volumes

Estimated oil recovered: BBL check - okay
Estimated water recovered: 0 BBL check - okay

Estimated Production Volumes Lost

Estimated Production Spilled: 8.0 BBL H2O 0.0 BBL OIL

Estimated Surface Damage

Surface Area: 4,000 sq. ft.

Surface Area: .0918 acre

Estimated Weights, and Volumes

Saturated Soil = 3,136,000 lbs 28,000 cu. ft. 1,037 cu. yds.
Total Liquid = 8 BBL 336 gallon 2,796 lbs

Air Emission from flowline leaks:

Volume of oil spill: - BBL
Separator gas calculated: - MCF
Separator gas released: - MCF
Gas released from oil: - lb
H2S released: - lb
Total HC gas released: - lb
Total HC gas released: - MCF

Air Emission of Reporting Requirements:

New Mexico Texas
HC gas release reportable? NO NO
H2S release reportable? NO NO

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 196913

CONDITIONS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 196913
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/14/2023



402 East Wood Avenue
Carlsbad, New Mexico 88220
Tel. 432-701-2159
www.ntgenvironmental.com

April 14, 2023

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Site Characterization and Closure Request Report
Igloo 19 CTB
Unit G, S19, T20S, R35E
Site Coordinates: 32.556105, -103.497985
Lea County, New Mexico
Incident ID: nAPP2307235324

Mr. Bratcher:

1. Introduction

On behalf of Caza Operating, LLC (Caza), New Tech Global Environmental, LLC (NTGE) has prepared this Site Characterization and Closure Request Report for submittal to the New Mexico Oil Conservation Division (NMCOD) District 2 Office in Artesia, New Mexico to document site assessment, remedial action activities, and sample analysis results for the Igloo 19 CTB (Site). The Site is in Unit Letter G, Section 19, of Township 23 South and Range 28 East in Lea County, New Mexico. The GPS coordinates for the release site are 32.556105° N latitude and -103.497985° W longitude. The site location with respect to the nearest town is shown on Figure 1 and the topography of the area is shown on Figure 2.

2. Background

Based on the Release Notification C-141 Form, the release occurred on November 10, 2022, because of a corrosion of the pipeline. Approximately 8 barrels (bbls) of produced water were released, of which 0 bbls were recovered. Upon discovery, the pipeline was shut-in, and the area was secured. The release area is shown in Figure 3. The initial C-141 form is attached.

The release falls under the jurisdiction of the NMOCD District 2 Office in Artesia, New Mexico. The NMOCD assigned the release with Incident Number nAPP2307235324. The Release Notification and Corrective Action, Site Assessment/Characterization, and Closure portions of Form C-141 are attached to the front of this report.

Mr. Mike Bratcher
 April 14, 2023
 Page 2 of 3

3. Groundwater and Site Characterization

The Site is in a low karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one known water sources within a ½-mile radius of the Site. The nearest identified ground water well is located 0.73 miles southwest of the Site in Sec 24 T20S R34S. The well was drilled in 1984 with a reported depth to groundwater of 698 ft below ground surface (bgs). A copy of the site characterization information and the associated USGS summary report is attached.

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft)
No receptors Identified within 0.5 mile of Site	---

Table 3.1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12 & 19.15.29.13)

Regulatory Standard	Chloride	TPH (GRO+DRO+MRO)	TPH (GRO+MRO)	BTEX	Benzene
19.15.29.13 Restoration, Reclamation and Re-Vegetation (Impacted Area 0-4 Feet)	600 mg/kg	100 mg/kg	---	50 mg/kg	10 mg/kg
Notes: --- = not defined					

4. Initial Soil Delineation Assessment Summary and Findings

On November 15, 2022, NTGE conducted site assessment activities to assess the extent of impacts at the Site. A total of three vertical sample points (i.e., S-1 through S-3) and six horizontal sample points (i.e., H-1 through H-6) were installed within the release area to characterize the impacts. Soil samples were collected in 0.5 ft intervals from depths ranging from 0 – 5.5 ft below ground surface (bgs) with a geotechnical hand auger. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8021B, total petroleum hydrocarbon (TPH) by method 8015B, and chloride by EPA method 300.0 by Eurofins Laboratories in Carlsbad, New Mexico.

The analytical results indicated that TPH and/or chloride concentrations exceeded the NMOCD regulatory limits in the areas of S-2 and S-3 and the vertical extent of impacts was undefined. Therefore, on January 13, 2023, NTGE conducted further site assessment activities to assess the vertical extent of impacts at the Site. A total of three test pits (i.e., TP-1 through TP-3) were installed within the release area to characterize the impacts. The test pits were advanced to depths of seven 7-8 ft bgs with a backhoe and soil samples were collected in 1 ft depth interval from 6 ft to the test pits terminus. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8021B, total petroleum hydrocarbon (TPH) by method 8015B, and chloride by SM 4500 CL-B by Cardinal Laboratories in Hobbs, New Mexico. Analytical results (attached) indicated that concentrations within the area of TP-2 exceeded the NMOCD's regulatory thresholds for chloride.

Mr. Mike Bratcher
April 14, 2023
Page 3 of 3

Analytical results from both sampling events are included in Table 1, attached. Soil boring and test pit locations are shown in Figure 3.

5. Remedial Action Activities and Confirmation Sampling

Upon receipt of the soil assessment data, Caza contract personnel proceeded with remedial action activities at the Site to include the excavation and disposal of impacted soils above the regulatory limits. The release area was excavated to depths ranging from 6 ft through 10 ft bgs within the release area. The excavation area is illustrated in Figure 4.

Upon excavation completion, a total of 27 confirmation samples were collected from the excavation base (i.e., CS-1 through CS-27) and 16 confirmation samples were collected from the excavation sidewalls (i.e., SW-1 through SW-16) to ensure impacted soils were successfully removed.

The confirmation samples were collected every 200 square feet and submitted to Cardinal Laboratories in Hobbs, New Mexico for chemical analysis. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8021B, total petroleum hydrocarbon (TPH) by method 8015B, and chloride by SM 4500 CL-B.

Analytical results indicated the extent of impacted soil had been removed and no further excavation was required. The excavation was backfilled and returned to near-natural grade. The final excavation extent and confirmation sample locations are shown in Figure 4. Analytical results of the confirmation samples are included in Table 2.

6. nAPP2307235324 Closure Request

Based on the assessment and subsequent remedial action activities, the Site is compliant with NMOCD's regulatory limits, and no further actions are required at the site. A copy of the final C- 141 is attached, and Caza formally requests a no further action designation for the Site. If you have any questions regarding this report or need additional information, please contact us at 432-701-2159.

Sincerely,
NTG Environmental



Ethan Sessums
Project Manager

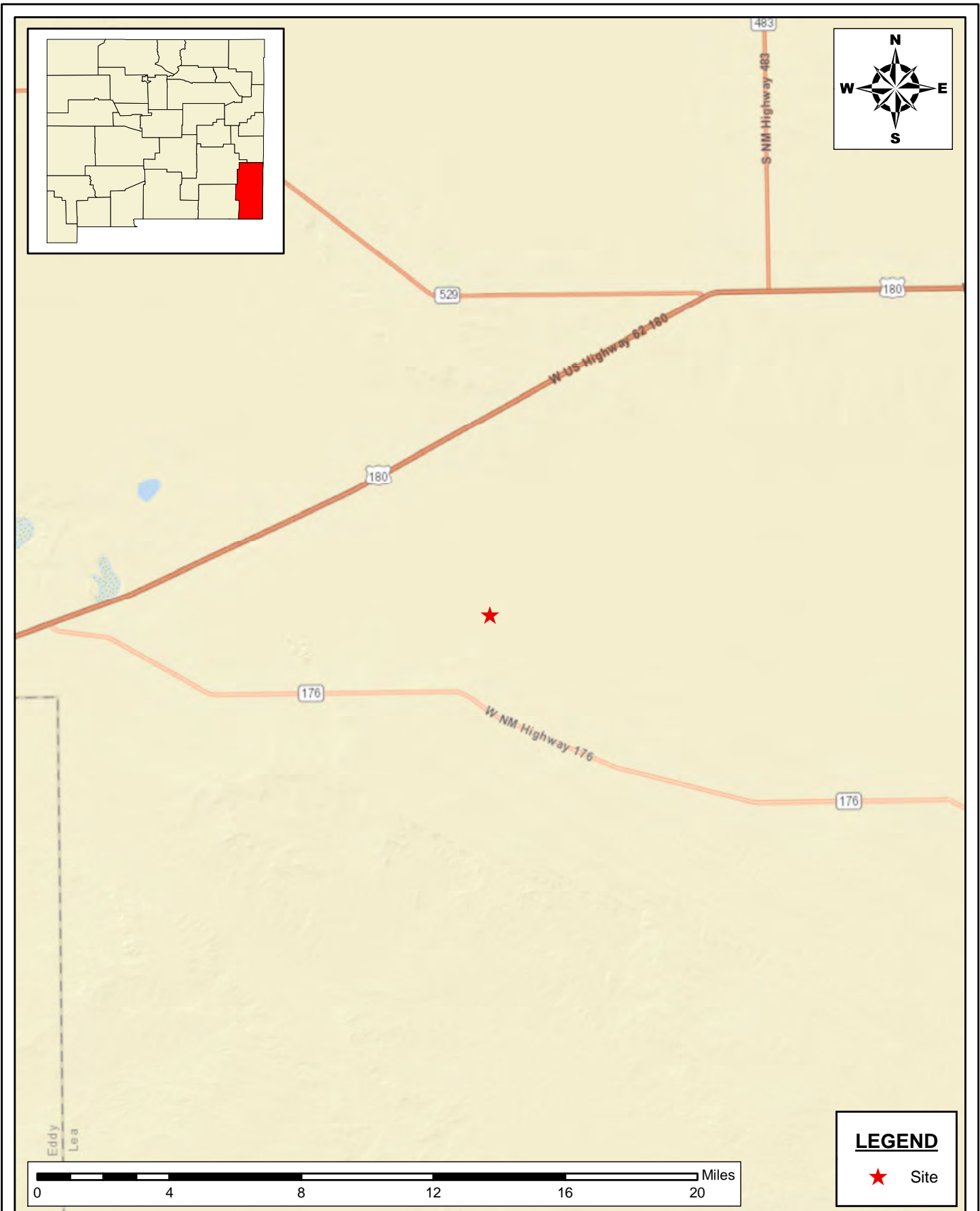
Attachments:

- Tables
- Figures
- Site Characterization Documentation
- Photographic Log
- Confirmation Sampling Notifications
- Laboratory Reports and Chain-of-Custody Documents

FIGURES



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**SITE LOCATION MAP
CLOSURE REPORT**
IGLOO 19 CTB
CAZA OPERATING, LLC
LEA COUNTY, NEW MEXICO

SCALE: As Shown Date: 3/23/2023 PROJECT #: 226568



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

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

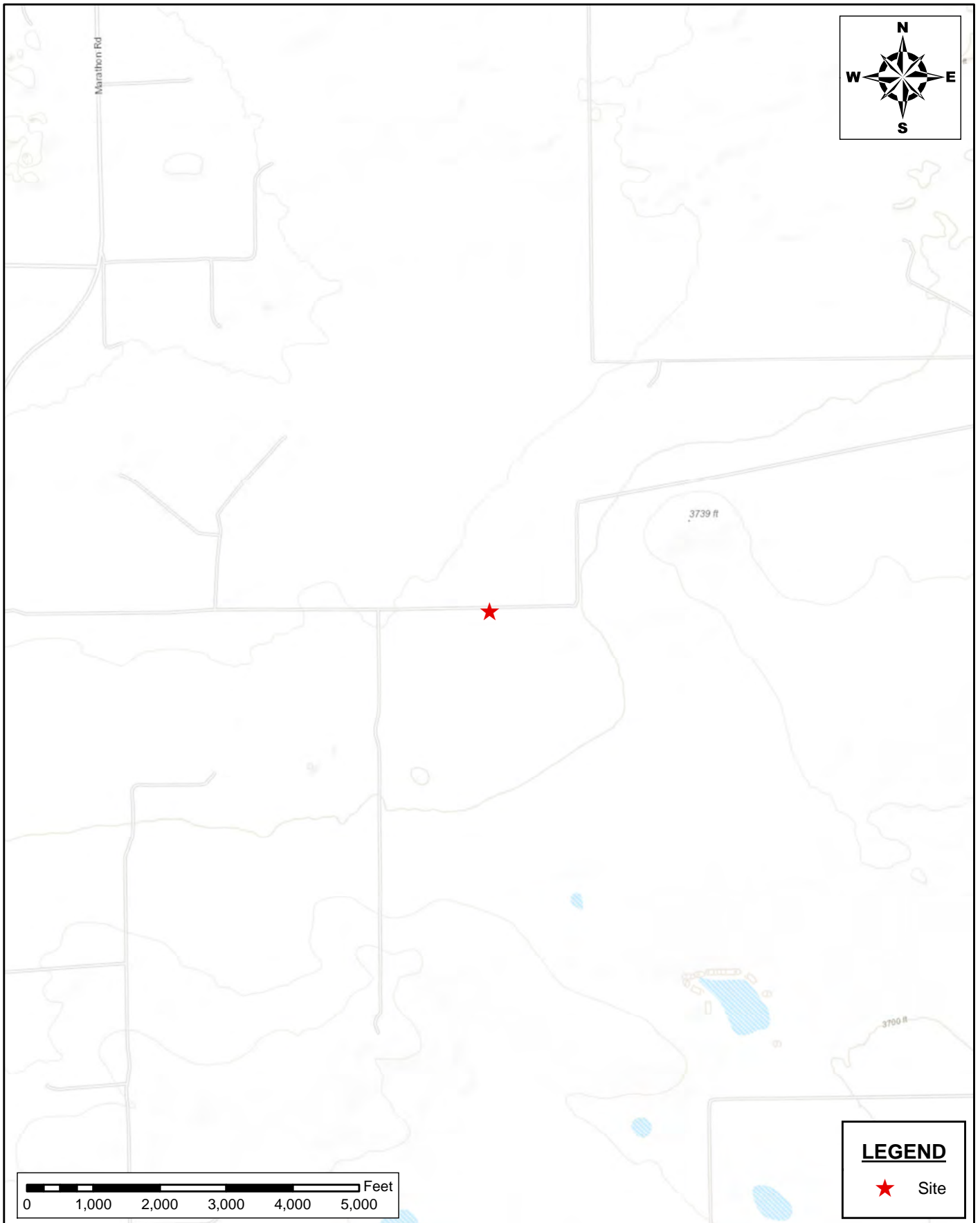
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FIGURE 1

SHEET NUMBER:

1 of 1

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**TOPOGRAPHIC MAP
CLOSURE REPORT**
IGLOO 19 CTB
CAZA OPERATING, LLC
LEA COUNTY, NEW MEXICO

SCALE: As Shown Date: 3/23/2023 PROJECT #: 226568



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

NOTES:

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2. Map Projection: NAD 1983

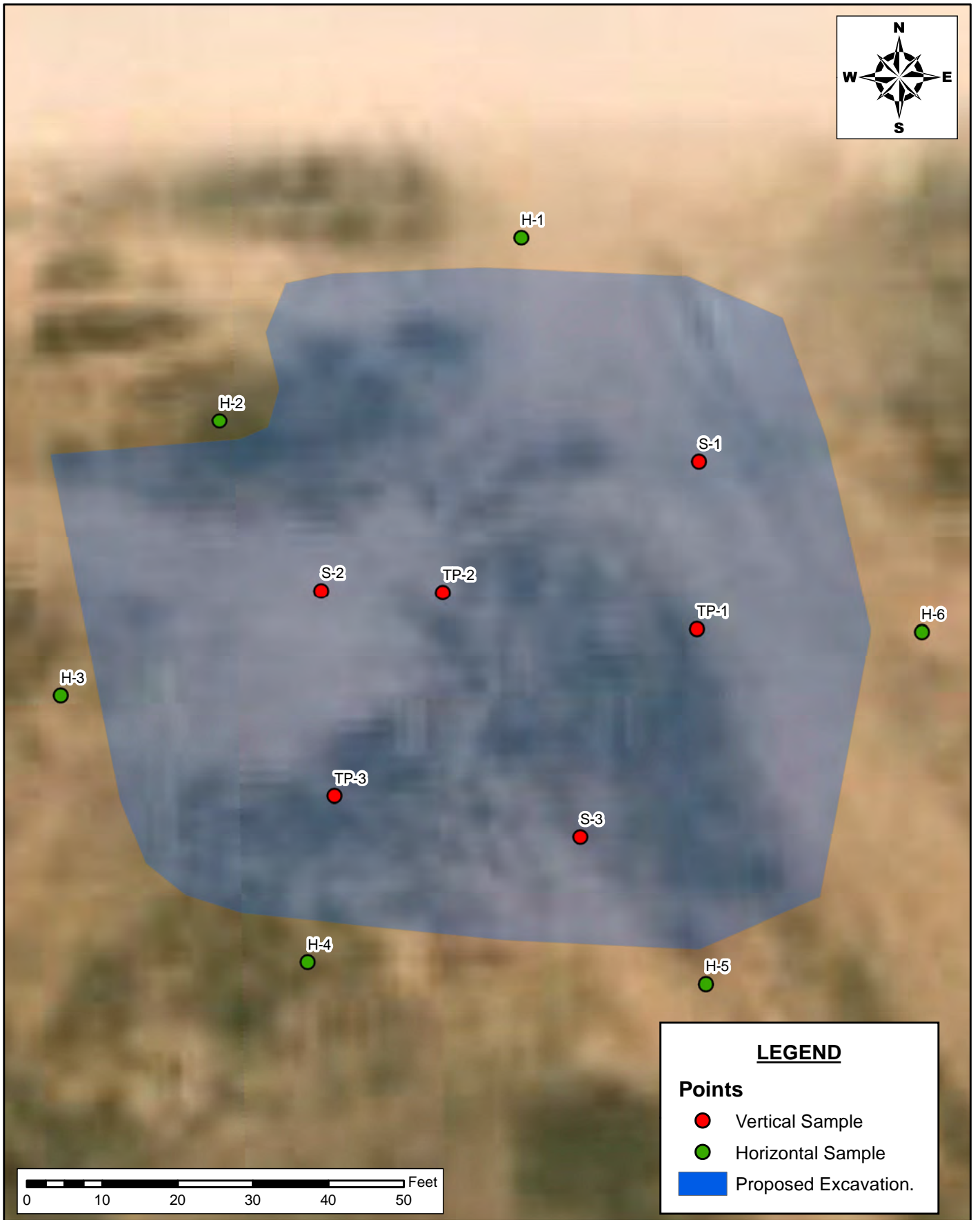
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FIGURE 2

SHEET NUMBER:

1 of 1

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**PROPOSED EXCAVATION MAP
CLOSURE REPORT**
IGLOO 19 CTB RELEASE
CAZA OPERATING, LLC
LEA COUNTY, NEW MEXICO

SCALE: As Shown Date: 3/27/2023 PROJECT #: 226568



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

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983

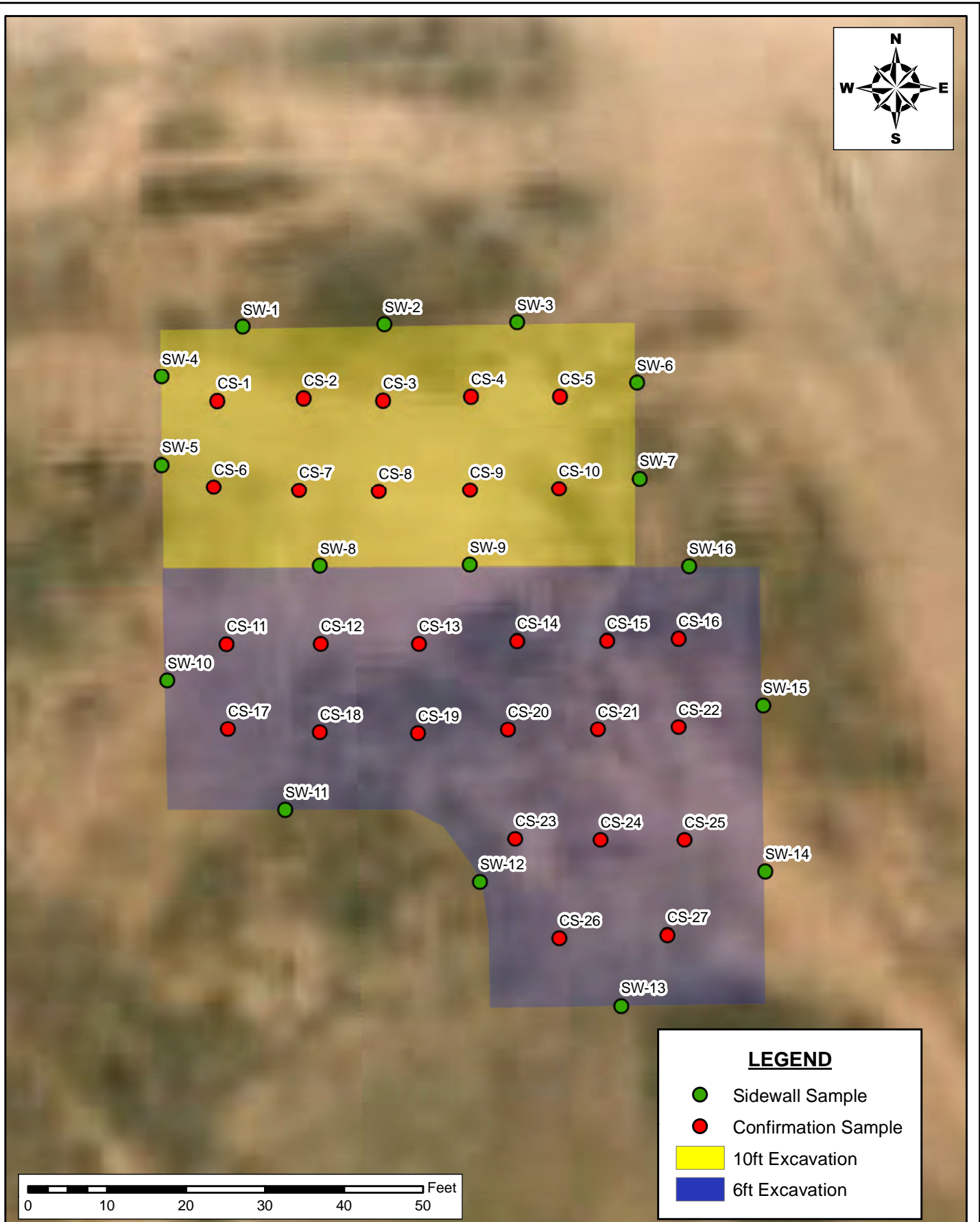
DRAWING NUMBER:

FIGURE 3

SHEET NUMBER:

1 of 1

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TABLES



Table 1 - Soil Delineation Samples - Remedial Action Activities
Caza Operating, L.L.C.
Igloo 19 CTB
Lea County, New Mexico

Sample ID	Date	Sample Depth	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX	Chlorides (mg/kg)	
			DRO	GRO	MRO	Total							
S-1	11/15/2022	0-0.5'	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	16.1	
S-1	11/15/2022	1-1.5'	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	13.3	
S-1	11/15/2022	2-2.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	59.9	
S-1	11/15/2022	3-3.5'	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	17.4	
S-1	11/15/2022	4-4.5'	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	35.3	
S-2	11/15/2022	0-0.5'	247	<50.0	135	382	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	378	
S-2	11/15/2022	1-1.5'	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	399	
S-2	11/15/2022	2-2.5'	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	7030	
S-2	11/15/2022	3-3.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	9970	
S-2	11/15/2022	4-4.5'	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	8580	
S-2	11/15/2022	5-5.5'	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	8520	
S-3	11/15/2022	0-0.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00494	5750	
S-3	11/15/2022	1-1.5'	81.7	<49.9	<49.9	81.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	6550	
S-3	11/15/2022	2-2.5'	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00502	8610	
S-3	11/15/2022	3-3.5'	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	6830	
S-3	11/15/2022	4-4.5'	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6950	
S-3	11/15/2022	5-5.5'	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	7980	
H-1	11/15/2022	n/a	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	34.5	
H-2	11/15/2022	n/a	<49.8	<49.8	<49.8	<49.8	<0.00400	<0.00400	<0.00400	<0.00800	<0.00800	13.2	
H-3	11/15/2022	n/a	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	17.8	
H-4	11/15/2022	n/a	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	14.4	
H-5	11/15/2022	n/a	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	17.5	
H-6	11/15/2022	n/a	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	17.7	
TP-1	1/13/2023	6'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0	
TP-1	1/13/2023	7'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0	
TP-2	1/13/2023	6'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	848	
TP-2	1/13/2023	7'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	160	
TP-2	1/13/2023	8'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	1840	
TP-2	1/13/2023	9'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	4080	
TP-2	1/13/2023	10'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	128	
TP-2	1/13/2023	11'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	160	
TP-3	1/13/2023	6'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	32	
TP-3	1/13/2023	7'	<10.0	<10.0	<10.0	<50.0	<0.050	<0.050	<0.050	<0.150	<0.300	32	
Regulatory Limits ^A							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													
			- exceeds regulatory limits										

Table 2
Summary of Soil Analytical Data - Confirmation Samples
Igloo 19 CTB
Caza Operating, LLC
Lea County, New Mexico

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH					Chloride
								GRO (C6-C10)	DRO (C10-C28)	GRO + DRO	MRO (C28-C35)	Total GRO/DRO/MRO	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			Table I Closure Criteria for Soil 0-55 feet Depth to Groundwater 19.15.29 NMAC										
10 mg/kg	---	---	---	50 mg/kg	---	---	---	---	100 mg/kg	600 mg/kg			
Confirmation Samples													
CS-1	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-2	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
CS-3	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
CS-4	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
CS-5	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96
CS-6	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
CS-7	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
CS-8	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
CS-9	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96
CS-10	3/20/2023	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
CS-11	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
CS-12	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
CS-13	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
CS-14	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
CS-15	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS-16	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
CS-17	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-18	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS-19	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS-20	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-21	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS-22	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
CS-23	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-24	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-25	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
CS-26	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
CS-27	3/20/2023	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
SW-1	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-2	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
SW-3	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48
SW-4	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-5	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-6	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-7	3/20/2023	0-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-8	3/20/2023	6-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-9	3/20/2023	6-10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-10	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
SW-11	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-12	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32

Table 2
Summary of Soil Analytical Data - Confirmation Samples
Igloo 19 CTB
Caza Operating, LLC
Lea County, New Mexico

Sample ID	Sample Date	Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH					Chloride
								GRO (C6 C-10)	DRO (C10 C28)	GRO + DRO	MRO (C28 C35)	Total GRO/DRO/MRO	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			Table I Closure Criteria for Soil 0-55 feet Depth to Groundwater 19.15.29 NMAC										
			10 mg/kg	---	---	---	50 mg/kg	---	---	---	---	100 mg/kg	600 mg/kg
SW-13	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-14	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64
SW-15	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32
SW-16	3/20/2023	0-6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32

Notes:

1. Values reported in mg/kg
2. < = Value Less Than Reporting Limit (RL)
3. Bold indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B

5. TPH analyses by EPA Method SW 8015 Mod.

6. GRO/DRO/MRO - Gasoline/Diesel/Motor Oil

7. Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table I Closure Criteria for the site.

8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table I Closure Criteria for the site (Surface to 4 Feet Below Grade).

9. --- Not Analyzed

 Sample Point Excavated

SITE CHARACTERIZATION DOCUMENTATION

Caza - Igloo 19 CTB
Sec 19 T20S R35E Unit G
32.556105 -103.497985
Eddy County, New Mexico

Site Characterization

-0 water features within specified distances of 1/2 mile radius

- Low Karst

-USGS Groundwater is 250' below surface, 2.24 miles North-northeast of the site, 1965 Drilled, Sec 22 T20S R34E

-USGS Groundwater is 85' below surface, 1.53 miles South-southwest of the site, 1954 Drilled, Sec 31 T20S R35E

-NMSEO Groundwater is 698' below surface, 0.73 miles West of the site, 1984 Drilled, Sec 24 T20S R34E

-NMSEO Groundwater is 370' below surface, 1.47 miles South-southwest of the site, 2013 Drilled, Sec 25 T20S R34E

RRALs due to insufficient groundwater data

-Chlorides 600 mg/kg

-TPH GRO+DRO+MRO 100 mg/kg







-BTEX 50 mg/kg

-Benzene 10 mg/kg

Igloo 9 CTB

distance to wells

Legend

-  .50 mile radius
-  0.73 miles
-  1.47 miles
-  1.53 mile
-  2.24 miles
-  Igloo 9 CTB

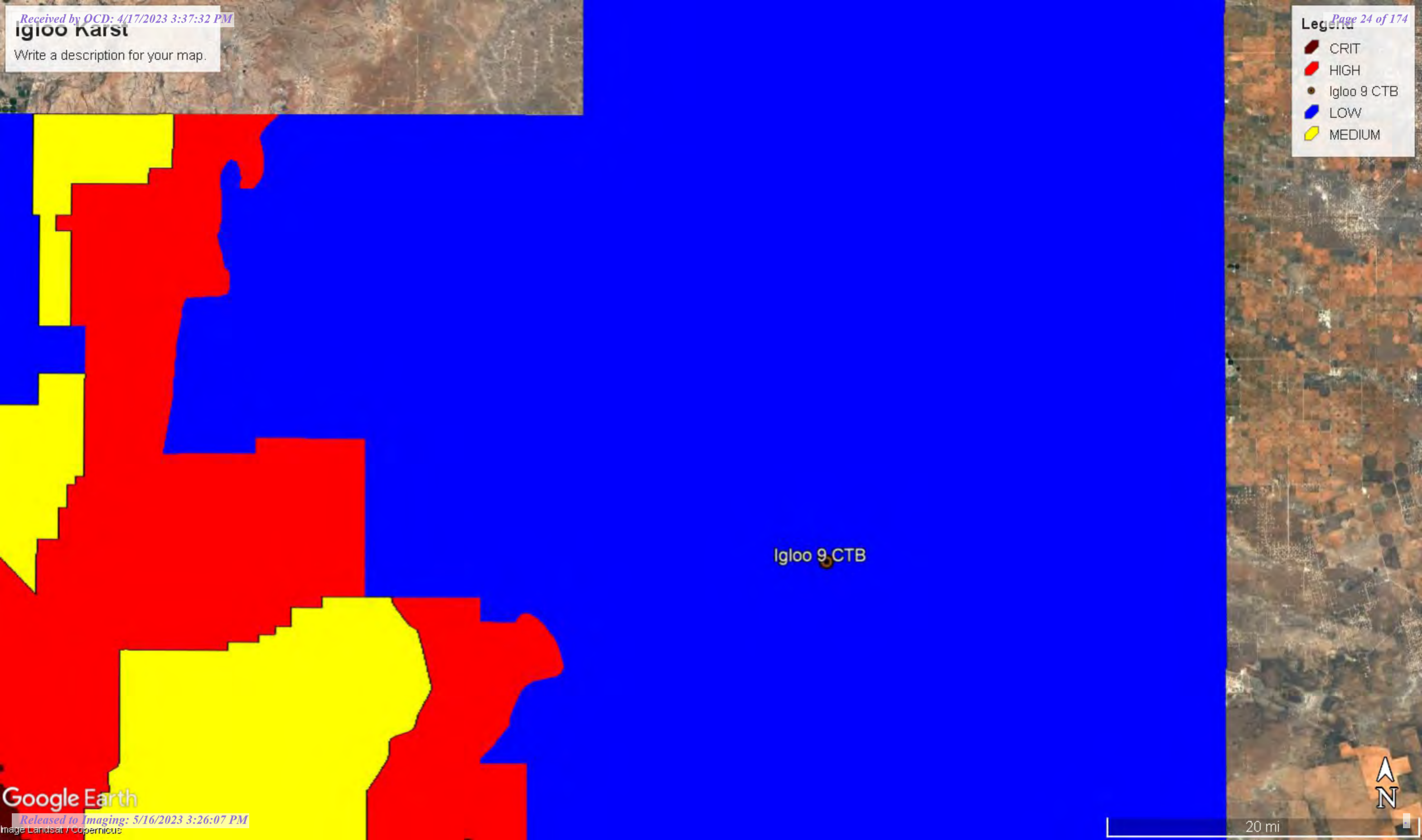


Igloo Karst

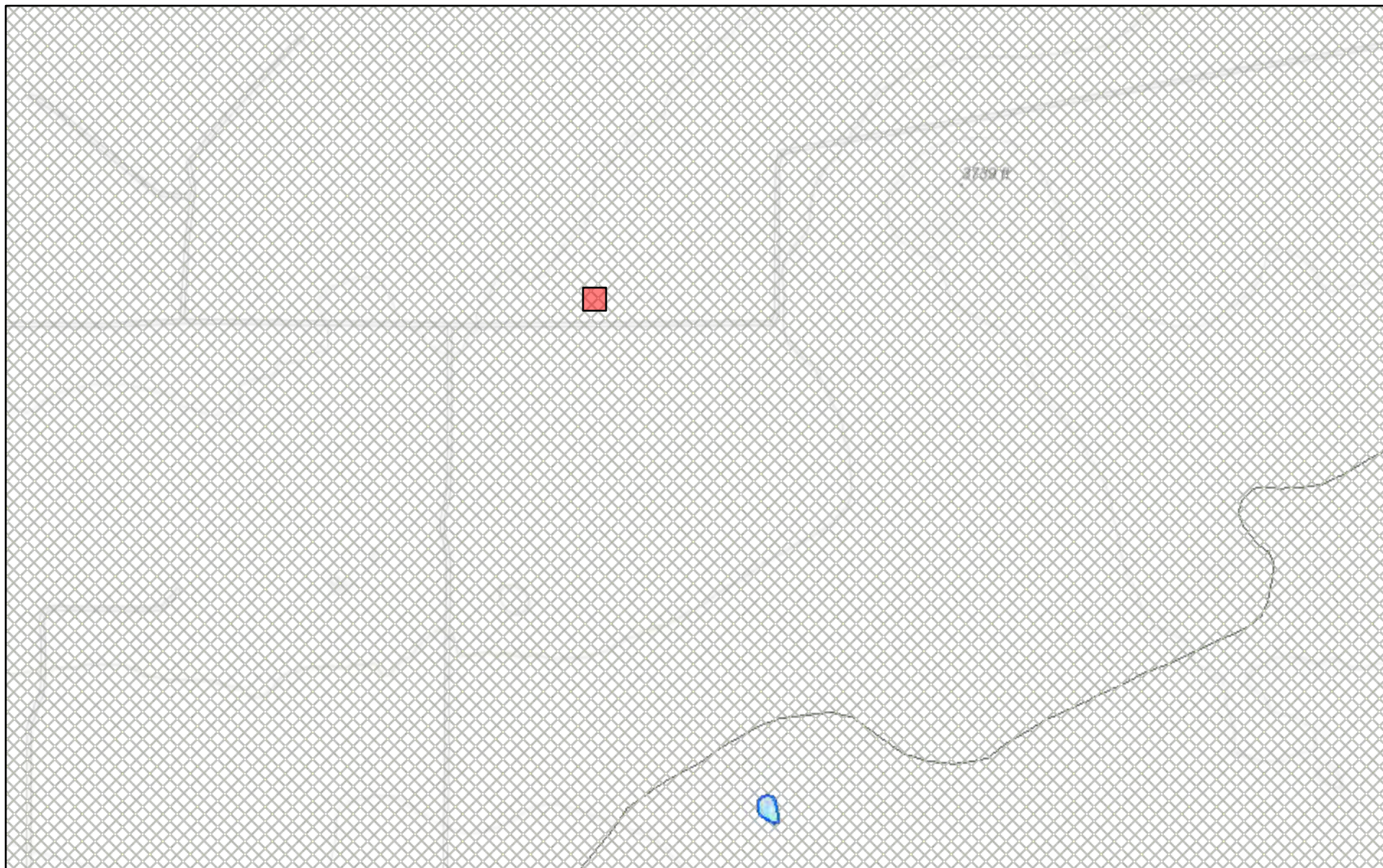
Write a description for your map.

Legend

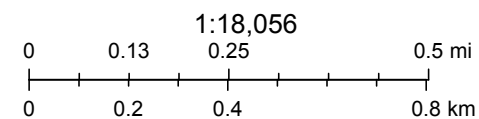
- CRIT
- HIGH
- Igloo 9 CTB
- LOW
- MEDIUM



New Mexico NFHL Data



November 18, 2022



FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

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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-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00665	CP	LE		1	4	24	20S	34E		639740	3603128*	1174	698	270	428
CP 01204 POD1	CP	LE		3	1	1	25	20S	34E	638755	3602250	2346	370		
CP 00654 POD1	CP	LE		4	4	12	20S	34E		640103	3605947*	2890	60		
CP 00800 POD1	CP	LE		2	2	2	22	20S	34E	637007	3603994*	3991	220		

Average Depth to Water: **270 feet**

Minimum Depth: **270 feet**

Maximum Depth: **270 feet**

Record Count: 4

UTMNAD83 Radius Search (in meters):

Easting (X): 640913.18

Northing (Y): 3603172.37

Radius: 4000

*UTM location was derived from PLSS - see Help

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

11/18/22 2:31 PM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER



USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Site Information

Geographic Area:
United States

GO

Click to hideNews Bulletins

- ALERT!** USGS will be performing an upgrade to their network on **Thursday, November 17, 2022, starting at 10:00pm EST**. During the maintenance period, the Water Data for the Nation web portal and water services will be accessible; however, delivery of the most recent time-series data and WaterAlert notifications will be disrupted. The maintenance period is not expected to exceed 4 hours, after which the backlog of time-series data will be processed and delivered.
- [Water Data for the Nation Blog](#)

USGS 323436103302802 20S.34E.12.443

Available data for this site

SUMMARY OF ALL AVAILABLE DATA

GO

Well Site

DESCRIPTION:

Latitude 32°34'36", Longitude 103°30'28" NAD27
Lea County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 3,660 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1968-03-21	1968-03-21	1

[Revisions](#)

Unavailable (site:0) (timeseries:0)

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

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Page Last Modified: 2022-11-18 16:23:18 EST

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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	01204 POD1	3	1	1	25	20S	34E	638755	3602250 

x

Driller License: 1682 **Driller Company:** HUNGRY HORSE, LLC.

Driller Name: NORRIS, JOHN D.

Drill Start Date: 10/08/2013 **Drill Finish Date:** 11/01/2013 **Plug Date:**

Log File Date: 12/12/2013 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: 8.00 **Depth Well:** 370 feet **Depth Water:**

x

Water Bearing Stratifications:	Top	Bottom	Description
	38	56	Sandstone/Gravel/Conglomerate
	56	270	Shale/Mudstone/Siltstone
	270	293	Shale/Mudstone/Siltstone
	293	370	Shale/Mudstone/Siltstone

x

Casing Perforations:	Top	Bottom
	0	370

x

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11/18/22 2:35 PM

POINT OF DIVERSION SUMMARY




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	Tw	Rng	X	Y
CP	00665	1	4	24	20S	34E	639740	3603128*	

x

Driller License: 421 **Driller Company:** GLENN'S WATER WELL SERVICE**Driller Name:** GLENN, CLARK A."CORKY" (LD)

Drill Start Date:	05/25/1984	Drill Finish Date:	05/28/1984	Plug Date:	
Log File Date:	06/11/1984	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	13 GPM
Casing Size:	6.63	Depth Well:	698 feet	Depth Water:	270 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	364	396	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	360	420

x

*UTM location was derived from PLSS - see Help

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USGS Water Resources

Data Category:

Site Information ▼

Geographic Area:

United States ▼

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- **ALERT!** USGS will be performing an upgrade to their network on **Thursday, November 17, 2022, starting at 10:00pm EST**. During the maintenance period, the Water Data for the Nation web portal and water services will be accessible; however, delivery of the most recent time-series data and WaterAlert notifications will be disrupted. The maintenance period is not expected to exceed 4 hours, after which the backlog of time-series data will be processed and delivered.
- [Water Data for the Nation Blog](#)

USGS 323148103295801 20S.35E.31.12311

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°32'06", Longitude 103°30'03" NAD27

Lea County, New Mexico , Hydrologic Unit 13070007

Well depth: 85 feet

Land surface altitude: 3,729.00 feet above NGVD29.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1954-06-25	1996-02-02	10

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Unavailable (site:0) (timeseries:0)

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National Water Information System: Web Interface

USGS Water Resources

Data Category:

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Geographic Area:

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- **ALERT!** USGS will be performing an upgrade to their network on **Thursday, November 17, 2022, starting at 10:00pm EST**. During the maintenance period, the Water Data for the Nation web portal and water services will be accessible; however, delivery of the most recent time-series data and WaterAlert notifications will be disrupted. The maintenance period is not expected to exceed 4 hours, after which the backlog of time-series data will be processed and delivered.
- [Water Data for the Nation Blog](#)

USGS 323336103322501 20S.34E.22.222333

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

Well Site

DESCRIPTION:

Latitude 32°33'36", Longitude 103°32'25" NAD27

Lea County, New Mexico , Hydrologic Unit 13060011

Well depth: 250 feet

Land surface altitude: 3,663 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Chinle Formation" (231CHNL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1965-11-17	1981-02-26	6

[Revisions](#)

Unavailable (site:0) (timeseries:0)

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PHOTOGRAPHIC LOG

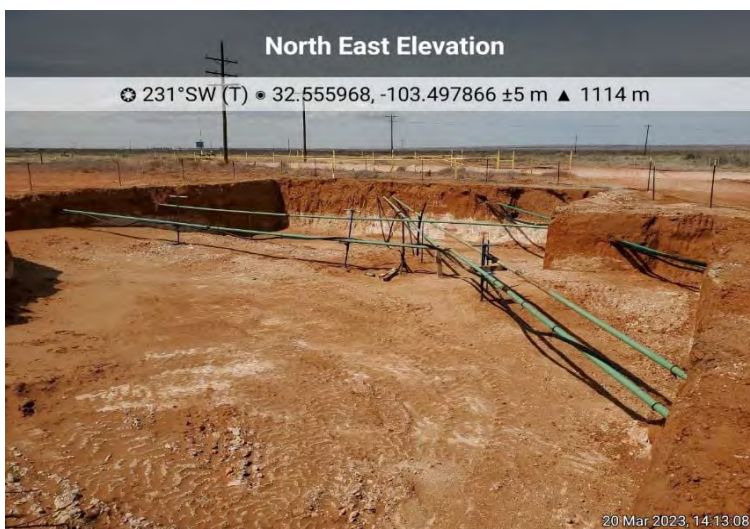


PHOTOGRAPHIC LOG**Caza Operating, LLC****Igloo 19 CTB****Photograph No. 1****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**

Area of Final Excavation.

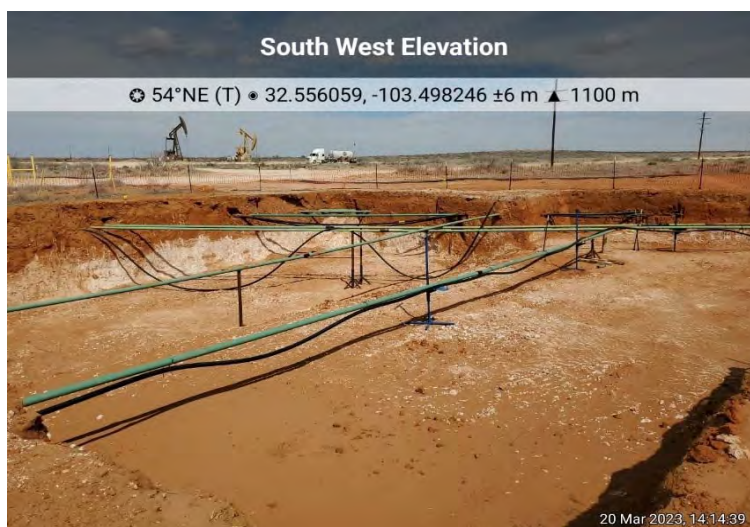
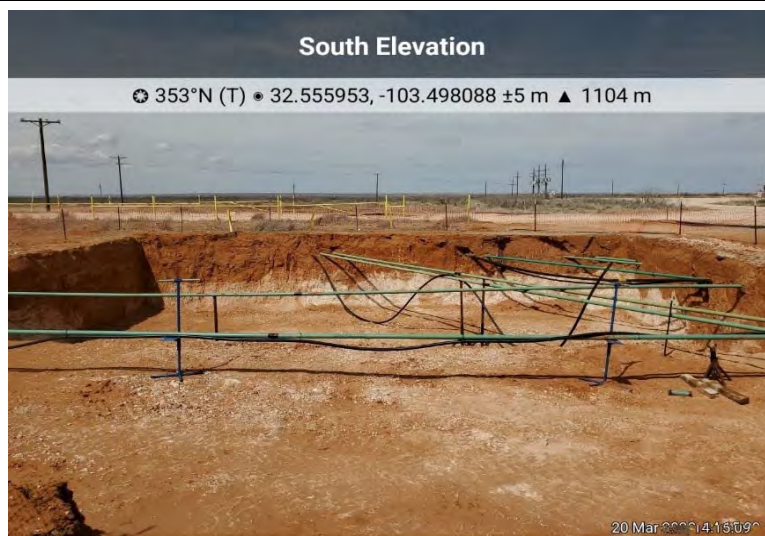
**Photograph No. 2****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**

Area of Final Excavation.

**Photograph No. 3****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**

Area of Final Excavation.



PHOTOGRAPHIC LOG**Caza Operating, LLC****Igloo 19 CTB****Photograph No. 4****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**
Area of Final Excavation.**Photograph No. 5****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**
Area of Final Excavation.**Photograph No. 6****Facility:** Igloo 19 CTB**County:** Lea County, New Mexico**Description:**
Area of Final Excavation.

CONFIRMATION SAMPLING NOTIFICATIONS



Kellan Smith

From: Ethan Sessums
Sent: Tuesday, March 14, 2023 5:57 PM
To: Enviro, OCD, EMNRD
Cc: NTGE Carlsbad
Subject: Sampling Notification

NTGE will be conducting confirmation sampling at the associated incident (nAPP2307235324) on behalf of Caza Petroleum next week March the 21st around 9 a.m. MDT and conclude these activities the following day March 22nd by the end of business.

Thanks,

Ethan Sessums
Project Manager
NTGE New Mexico
402 E Wood Ave, Carlsbad, NM 88220
M: (254)-266-5456 W: (432)-701-2159
Email: esessums@ntglobal.com

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LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Gordon Banks

NT Global

701 Tradewinds Blvd

Midland, Texas 79706

Generated 11/28/2022 4:20:39 PM

JOB DESCRIPTION

Igloo 19 CTB

SDG NUMBER Lea Co NM

JOB NUMBER

890-3486-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

Generated
11/28/2022 4:20:39 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: NT Global
Project/Site: Igloo 19 CTB

Laboratory Job ID: 890-3486-1
SDG: Lea Co NM

Table of Contents

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Definitions/Glossary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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
F1	MS and/or MSD recovery 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.
α	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: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Job ID: 890-3486-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3486-1

Receipt

The samples were received on 11/15/2022 4:45 PM. 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 13.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-0.5) (890-3486-1), S-1 (1-1.5) (890-3486-2), S-1 (2-2.5) (890-3486-3), S-1 (3-3.5) (890-3486-4), S-1 (4-4.5) (890-3486-5), S-2 (0-0.5) (890-3486-6), S-2 (1-1.5) (890-3486-7), S-2 (2-2.5) (890-3486-8), S-2 (3-3.5) (890-3486-9), S-2 (4-4.5) (890-3486-10), S-2 (5-5.5) (890-3486-11), S-3 (0-0.5) (890-3486-12), S-3 (1-1.5) (890-3486-13), S-3 (2-2.5) (890-3486-14), S-3 (3-3.5) (890-3486-15), S-3 (4-4.5) (890-3486-16), S-3 (5-5.5) (890-3486-17), H-1 (890-3486-18), H-2 (890-3486-19), H-3 (890-3486-20), H-4 (890-3486-21), H-5 (890-3486-22) and H-6 (890-3486-23).

GC VOA

Method 8021B: The method blank for preparation batch 880-40316 and analytical batch 880-40265 contained o-Xylene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40340 and analytical batch 880-40265 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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 surrogate recovery for the blank associated with preparation batch 880-39931 and analytical batch 880-40032 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-1 (1-1.5) (890-3486-2), S-1 (2-2.5) (890-3486-3), S-1 (3-3.5) (890-3486-4) and S-1 (4-4.5) (890-3486-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-2 (1-1.5) (890-3486-7), S-2 (2-2.5) (890-3486-8), S-2 (3-3.5) (890-3486-9) and S-2 (4-4.5) (890-3486-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: S-2 (5-5.5) (890-3486-11), S-3 (0-0.5) (890-3486-12), S-3 (1-1.5) (890-3486-13), S-3 (2-2.5) (890-3486-14), S-3 (4-4.5) (890-3486-16), S-3 (5-5.5) (890-3486-17) and H-1 (890-3486-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-39931 and analytical batch 880-40032 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: The surrogate recovery for the blank associated with preparation batch 880-39929 and analytical batch 880-40028 was outside the upper control limits.

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 880-39831 and analytical batch 880-40150 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because

Case Narrative

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Job ID: 890-3486-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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.

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (0-0.5)

Lab Sample ID: 890-3486-1

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 0 - 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 16:35	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 16:35	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 16:35	1
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.00402		mg/Kg		11/22/22 17:58	11/24/22 16:35	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 16:35	1
Xylenes, Total	<0.00402	U F1 F2	0.00402		mg/Kg		11/22/22 17:58	11/24/22 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	182	S1+	70 - 130	11/22/22 17:58	11/24/22 16:35	1
1,4-Difluorobenzene (Surr)	70		70 - 130	11/22/22 17:58	11/24/22 16:35	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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 F1	50.0		mg/Kg		11/18/22 14:32	11/21/22 11:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 11:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 11:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/18/22 14:32	11/21/22 11:55	1
o-Terphenyl	116		70 - 130	11/18/22 14:32	11/21/22 11:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.1		4.98		mg/Kg			11/22/22 01:22	1

Client Sample ID: S-1 (1-1.5)

Lab Sample ID: 890-3486-2

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 17:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 17:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 17:01	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/22/22 17:58	11/24/22 17:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 17:01	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/22/22 17:58	11/24/22 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	212	S1+	70 - 130	11/22/22 17:58	11/24/22 17:01	1

Eurofins Carlsbad

Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (1-1.5)

Lab Sample ID: 890-3486-2

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130	11/22/22 17:58	11/24/22 17:01	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 12:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 12:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 12:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				11/18/22 14:32	11/21/22 12:58	1
o-Terphenyl	134	S1+	70 - 130				11/18/22 14:32	11/21/22 12:58	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.3		4.95		mg/Kg			11/22/22 01:28	1

Client Sample ID: S-1 (2-2.5)

Lab Sample ID: 890-3486-3

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 17:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 17:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	203	S1+	70 - 130	11/22/22 17:58	11/24/22 17:27	1
1,4-Difluorobenzene (Surr)	76		70 - 130	11/22/22 17:58	11/24/22 17:27	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (2-2.5)

Lab Sample ID: 890-3486-3

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: SW846 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		11/18/22 14:32	11/21/22 13:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 13:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 13:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				11/18/22 14:32	11/21/22 13:19	1
o-Terphenyl	150	S1+	70 - 130				11/18/22 14:32	11/21/22 13:19	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.9		5.04		mg/Kg			11/22/22 01:45	1

Client Sample ID: S-1 (3-3.5)

Lab Sample ID: 890-3486-4

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 3 - 3.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	217	S1+	70 - 130				11/22/22 17:58	11/24/22 17:54	1
1,4-Difluorobenzene (Surr)	71		70 - 130				11/22/22 17:58	11/24/22 17:54	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 13:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 13:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/18/22 14:32	11/21/22 13:41	1
o-Terphenyl	133	S1+	70 - 130				11/18/22 14:32	11/21/22 13:41	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (3-3.5)

Lab Sample ID: 890-3486-4

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 3 - 3.5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.4		4.97		mg/Kg			11/22/22 01:51	1

Client Sample ID: S-1 (4-4.5)

Lab Sample ID: 890-3486-5

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 4 - 4.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/24/22 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	205	S1+	70 - 130				11/22/22 17:58	11/24/22 18:20	1
1,4-Difluorobenzene (Surr)	70		70 - 130				11/22/22 17:58	11/24/22 18:20	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 14:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 14:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 14:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				11/18/22 14:32	11/21/22 14:01	1
o-Terphenyl	151	S1+	70 - 130				11/18/22 14:32	11/21/22 14:01	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.3		5.00		mg/Kg			11/22/22 02:08	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (0-0.5)

Lab Sample ID: 890-3486-6

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 0 - 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 18:46	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 18:46	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 18:46	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/24/22 18:46	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 18:46	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/24/22 18:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	230	S1+	70 - 130	11/22/22 17:58	11/24/22 18:46	1
1,4-Difluorobenzene (Surr)	73		70 - 130	11/22/22 17:58	11/24/22 18:46	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	382		50.0		mg/Kg			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 14:22	1
Diesel Range Organics (Over C10-C28)	247		50.0		mg/Kg		11/18/22 14:32	11/21/22 14:22	1
Oil Range Organics (Over C28-C36)	135		50.0		mg/Kg		11/18/22 14:32	11/21/22 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	11/18/22 14:32	11/21/22 14:22	1
o-Terphenyl	116		70 - 130	11/18/22 14:32	11/21/22 14:22	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	378		4.99		mg/Kg			11/22/22 02:13	1

Client Sample ID: S-2 (1-1.5)

Lab Sample ID: 890-3486-7

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 19:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 19:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 19:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/22/22 17:58	11/24/22 19:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 19:12	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/22/22 17:58	11/24/22 19:12	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (1-1.5)

Lab Sample ID: 890-3486-7

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	235	S1+	70 - 130	11/22/22 17:58	11/24/22 19:12	1
1,4-Difluorobenzene (Surr)	73		70 - 130	11/22/22 17:58	11/24/22 19:12	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 14:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 14:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				11/18/22 14:32	11/21/22 14:44	1
o-Terphenyl	146	S1+	70 - 130				11/18/22 14:32	11/21/22 14:44	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	399		4.98		mg/Kg			11/22/22 02:19	1

Client Sample ID: S-2 (2-2.5)

Lab Sample ID: 890-3486-8

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 19:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 19:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 19:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/24/22 19:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 19:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/24/22 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	212	S1+	70 - 130	11/22/22 17:58	11/24/22 19:38	1
1,4-Difluorobenzene (Surr)	83		70 - 130	11/22/22 17:58	11/24/22 19:38	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (2-2.5)

Lab Sample ID: 890-3486-8

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: SW846 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		11/18/22 14:32	11/21/22 15:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 15:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 15:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130				11/18/22 14:32	11/21/22 15:04	1
o-Terphenyl	152	S1+	70 - 130				11/18/22 14:32	11/21/22 15:04	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7030		50.0		mg/Kg			11/22/22 02:24	10

Client Sample ID: S-2 (3-3.5)

Lab Sample ID: 890-3486-9

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 3 - 3.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 20:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	245	S1+	70 - 130				11/22/22 17:58	11/24/22 20:05	1
1,4-Difluorobenzene (Surr)	80		70 - 130				11/22/22 17:58	11/24/22 20:05	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 15:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 15:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				11/18/22 14:32	11/21/22 15:25	1
o-Terphenyl	153	S1+	70 - 130				11/18/22 14:32	11/21/22 15:25	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (3-3.5)

Lab Sample ID: 890-3486-9

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 3 - 3.5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9970		100		mg/Kg			11/22/22 02:30	20

Client Sample ID: S-2 (4-4.5)

Lab Sample ID: 890-3486-10

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 4 - 4.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/24/22 20:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	244	S1+	70 - 130				11/22/22 17:58	11/24/22 20:31	1
1,4-Difluorobenzene (Surr)	80		70 - 130				11/22/22 17:58	11/24/22 20:31	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 15:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 15:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 15:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				11/18/22 14:32	11/21/22 15:47	1
o-Terphenyl	133	S1+	70 - 130				11/18/22 14:32	11/21/22 15:47	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8580		49.5		mg/Kg			11/22/22 02:36	10

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (5-5.5)

Lab Sample ID: 890-3486-11

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 5 - 5.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 22:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 22:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 22:18	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/24/22 22:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/24/22 22:18	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/24/22 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	220	S1+	70 - 130	11/22/22 17:58	11/24/22 22:18	1
1,4-Difluorobenzene (Surr)	70		70 - 130	11/22/22 17:58	11/24/22 22:18	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 16:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 16:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	11/18/22 14:32	11/21/22 16:28	1
o-Terphenyl	132	S1+	70 - 130	11/18/22 14:32	11/21/22 16:28	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8520		50.1		mg/Kg			11/22/22 02:42	10

Client Sample ID: S-3 (0-0.5)

Lab Sample ID: 890-3486-12

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 0 - 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 22:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 22:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/24/22 22:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/24/22 22:44	1
o-Xylene	0.00494		0.00199		mg/Kg		11/22/22 17:58	11/24/22 22:44	1
Xylenes, Total	0.00494		0.00398		mg/Kg		11/22/22 17:58	11/24/22 22:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	229	S1+	70 - 130	11/22/22 17:58	11/24/22 22:44	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (0-0.5)

Lab Sample ID: 890-3486-12

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 0 - 0.5

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130	11/22/22 17:58	11/24/22 22:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00494		0.00398		mg/Kg			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 16:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 16:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				11/18/22 14:32	11/21/22 16:50	1
o-Terphenyl	121		70 - 130				11/18/22 14:32	11/21/22 16:50	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5750		49.9		mg/Kg			11/22/22 04:35	10

Client Sample ID: S-3 (1-1.5)

Lab Sample ID: 890-3486-13

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 23:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 23:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 23:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/22/22 17:58	11/24/22 23:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 23:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/22/22 17:58	11/24/22 23:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	207	S1+	70 - 130	11/22/22 17:58	11/24/22 23:10	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	11/22/22 17:58	11/24/22 23:10	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	81.7		50.0		mg/Kg			11/22/22 10:35	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (1-1.5)

Lab Sample ID: 890-3486-13

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 1 - 1.5

Method: SW846 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		11/18/22 14:32	11/21/22 17:10	1
Diesel Range Organics (Over C10-C28)	81.7		50.0		mg/Kg		11/18/22 14:32	11/21/22 17:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/18/22 14:32	11/21/22 17:10	1
o-Terphenyl	118		70 - 130				11/18/22 14:32	11/21/22 17:10	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6550		49.8		mg/Kg			11/22/22 04:40	10

Client Sample ID: S-3 (2-2.5)

Lab Sample ID: 890-3486-14

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
o-Xylene	0.00502		0.00198		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
Xylenes, Total	0.00502		0.00396		mg/Kg		11/22/22 17:58	11/24/22 23:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	238	S1+	70 - 130				11/22/22 17:58	11/24/22 23:36	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130				11/22/22 17:58	11/24/22 23:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00502		0.00396		mg/Kg			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 17:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 17:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				11/18/22 14:32	11/21/22 17:31	1
o-Terphenyl	156	S1+	70 - 130				11/18/22 14:32	11/21/22 17:31	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (2-2.5)

Lab Sample ID: 890-3486-14

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 2 - 2.5

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8610	F1	49.9		mg/Kg			11/22/22 04:46	10

Client Sample ID: S-3 (3-3.5)

Lab Sample ID: 890-3486-15

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 3 - 3.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		11/22/22 17:58	11/25/22 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	242	S1+	70 - 130				11/22/22 17:58	11/25/22 00:02	1
1,4-Difluorobenzene (Surr)	75		70 - 130				11/22/22 17:58	11/25/22 00:02	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 17:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 17:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				11/18/22 14:32	11/21/22 17:52	1
o-Terphenyl	122		70 - 130				11/18/22 14:32	11/21/22 17:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6830		50.4		mg/Kg			11/22/22 05:03	10

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (4-4.5)

Lab Sample ID: 890-3486-16

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 4 - 4.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/25/22 00:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/25/22 00:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/25/22 00:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/25/22 00:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/22 17:58	11/25/22 00:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/22 17:58	11/25/22 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	224	S1+	70 - 130	11/22/22 17:58	11/25/22 00:29	1
1,4-Difluorobenzene (Surr)	77		70 - 130	11/22/22 17:58	11/25/22 00:29	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 18:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 18:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	11/18/22 14:32	11/21/22 18:13	1
o-Terphenyl	144	S1+	70 - 130	11/18/22 14:32	11/21/22 18:13	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6950		49.7		mg/Kg			11/22/22 05:09	10

Client Sample ID: S-3 (5-5.5)

Lab Sample ID: 890-3486-17

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 5 - 5.5

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/25/22 00:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/25/22 00:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/25/22 00:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/25/22 00:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/25/22 00:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/25/22 00:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	233	S1+	70 - 130	11/22/22 17:58	11/25/22 00:56	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (5-5.5)

Lab Sample ID: 890-3486-17

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Sample Depth: 5 - 5.5

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81		70 - 130	11/22/22 17:58	11/25/22 00:56	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 18:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 18:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 14:32	11/21/22 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				11/18/22 14:32	11/21/22 18:33	1
o-Terphenyl	154	S1+	70 - 130				11/18/22 14:32	11/21/22 18:33	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7980		50.4		mg/Kg			11/22/22 05:26	10

Client Sample ID: H-1

Lab Sample ID: 890-3486-18

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/22/22 17:58	11/25/22 01:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	216	S1+	70 - 130				11/22/22 17:58	11/25/22 01:22	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130				11/22/22 17:58	11/25/22 01:22	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-1

Lab Sample ID: 890-3486-18

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 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		11/18/22 14:32	11/21/22 18:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 18:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	11/18/22 14:32	11/21/22 18:53	1
o-Terphenyl	154	S1+	70 - 130	11/18/22 14:32	11/21/22 18:53	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.5		4.97		mg/Kg			11/22/22 05:31	1

Client Sample ID: H-2

Lab Sample ID: 890-3486-19

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0400	U	0.0400		mg/Kg		11/25/22 17:09	11/25/22 22:35	20
Toluene	<0.0400	U	0.0400		mg/Kg		11/25/22 17:09	11/25/22 22:35	20
Ethylbenzene	<0.0400	U	0.0400		mg/Kg		11/25/22 17:09	11/25/22 22:35	20
m-Xylene & p-Xylene	<0.0800	U	0.0800		mg/Kg		11/25/22 17:09	11/25/22 22:35	20
o-Xylene	<0.0400	U	0.0400		mg/Kg		11/25/22 17:09	11/25/22 22:35	20
Xylenes, Total	<0.0800	U	0.0800		mg/Kg		11/25/22 17:09	11/25/22 22:35	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	11/25/22 17:09	11/25/22 22:35	20
1,4-Difluorobenzene (Surr)	84		70 - 130	11/25/22 17:09	11/25/22 22:35	20

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0800	U	0.0800		mg/Kg			11/28/22 15:04	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 19:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/18/22 14:32	11/21/22 19:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/18/22 14:32	11/21/22 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	11/18/22 14:32	11/21/22 19:14	1
o-Terphenyl	125		70 - 130	11/18/22 14:32	11/21/22 19:14	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-2

Lab Sample ID: 890-3486-19

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.2		5.00		mg/Kg			11/22/22 05:37	1

Client Sample ID: H-3

Lab Sample ID: 890-3486-20

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/25/22 02:16	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/25/22 02:16	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/25/22 02:16	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		11/22/22 17:58	11/25/22 02:16	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/22 17:58	11/25/22 02:16	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		11/22/22 17:58	11/25/22 02:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	226	S1+	70 - 130	11/22/22 17:58	11/25/22 02:16	1
1,4-Difluorobenzene (Surr)	79		70 - 130	11/22/22 17:58	11/25/22 02:16	1

Method: TAL SOP 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			11/28/22 15:38	1

Method: SW846 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			11/22/22 10:35	1

Method: SW846 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		11/18/22 14:32	11/21/22 19:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 19:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	11/18/22 14:32	11/21/22 19:34	1
o-Terphenyl	129		70 - 130	11/18/22 14:32	11/21/22 19:34	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.8		4.98		mg/Kg			11/22/22 05:43	1

Client Sample ID: H-4

Lab Sample ID: 890-3486-21

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:11	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-4

Lab Sample ID: 890-3486-21

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		11/23/22 14:51	11/24/22 10:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 10:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130				11/23/22 14:51	11/24/22 10:11	1
1,4-Difluorobenzene (Surr)	96		70 - 130				11/23/22 14:51	11/24/22 10:11	1

Method: TAL SOP 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			11/28/22 16:23	1

Method: SW846 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			11/22/22 10:43	1

Method: SW846 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		11/18/22 13:39	11/22/22 03:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/18/22 13:39	11/22/22 03:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/18/22 13:39	11/22/22 03:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				11/18/22 13:39	11/22/22 03:02	1
o-Terphenyl	102		70 - 130				11/18/22 13:39	11/22/22 03:02	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.4		4.97		mg/Kg			11/22/22 05:48	1

Client Sample ID: H-5

Lab Sample ID: 890-3486-22

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		11/23/22 14:51	11/24/22 10:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				11/23/22 14:51	11/24/22 10:31	1
1,4-Difluorobenzene (Surr)	108		70 - 130				11/23/22 14:51	11/24/22 10:31	1

Method: TAL SOP 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			11/28/22 16:23	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-5

Lab Sample ID: 890-3486-22

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 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			11/22/22 10:43	1

Method: SW846 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		11/18/22 13:39	11/22/22 03:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 13:39	11/22/22 03:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 13:39	11/22/22 03:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				11/18/22 13:39	11/22/22 03:23	1
o-Terphenyl	85		70 - 130				11/18/22 13:39	11/22/22 03:23	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.5		4.95		mg/Kg			11/22/22 05:54	1

Client Sample ID: H-6

Lab Sample ID: 890-3486-23

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/23/22 14:51	11/24/22 10:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				11/23/22 14:51	11/24/22 10:52	1
1,4-Difluorobenzene (Surr)	110		70 - 130				11/23/22 14:51	11/24/22 10:52	1

Method: TAL SOP 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			11/28/22 16:23	1

Method: SW846 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			11/22/22 10:43	1

Method: SW846 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		11/18/22 13:39	11/22/22 03:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/18/22 13:39	11/22/22 03:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/18/22 13:39	11/22/22 03:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				11/18/22 13:39	11/22/22 03:45	1

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Client Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-6
Date Collected: 11/15/22 00:00
Date Received: 11/15/22 16:45

Lab Sample ID: 890-3486-23
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	103		70 - 130	11/18/22 13:39	11/22/22 03:45	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.7		5.01		mg/Kg			11/22/22 05:59	1

Surrogate Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea 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	DFBZ1
		(70-130)	(70-130)
890-3486-1	S-1 (0-0.5)	182 S1+	70
890-3486-1 MS	S-1 (0-0.5)	215 S1+	85
890-3486-1 MSD	S-1 (0-0.5)	199 S1+	74
890-3486-2	S-1 (1-1.5)	212 S1+	67 S1-
890-3486-3	S-1 (2-2.5)	203 S1+	76
890-3486-4	S-1 (3-3.5)	217 S1+	71
890-3486-5	S-1 (4-4.5)	205 S1+	70
890-3486-6	S-2 (0-0.5)	230 S1+	73
890-3486-7	S-2 (1-1.5)	235 S1+	73
890-3486-8	S-2 (2-2.5)	212 S1+	83
890-3486-9	S-2 (3-3.5)	245 S1+	80
890-3486-10	S-2 (4-4.5)	244 S1+	80
890-3486-11	S-2 (5-5.5)	220 S1+	70
890-3486-12	S-3 (0-0.5)	229 S1+	70
890-3486-13	S-3 (1-1.5)	207 S1+	66 S1-
890-3486-14	S-3 (2-2.5)	238 S1+	68 S1-
890-3486-15	S-3 (3-3.5)	242 S1+	75
890-3486-16	S-3 (4-4.5)	224 S1+	77
890-3486-17	S-3 (5-5.5)	233 S1+	81
890-3486-18	H-1	216 S1+	67 S1-
890-3486-19	H-2	127	84
890-3486-20	H-3	226 S1+	79
890-3486-21	H-4	84	96
890-3486-21 MS	H-4	95	114
890-3486-21 MSD	H-4	94	115
890-3486-22	H-5	97	108
890-3486-23	H-6	109	110
890-3507-A-1-G MS	Matrix Spike	80	108
890-3507-A-1-H MSD	Matrix Spike Duplicate	84	104
LCS 880-40255/1-A	Lab Control Sample	180 S1+	72
LCS 880-40340/1-A	Lab Control Sample	90	115
LCS 880-40356/1-A	Lab Control Sample	78	107
LCSD 880-40255/2-A	Lab Control Sample Dup	200 S1+	92
LCSD 880-40340/2-A	Lab Control Sample Dup	97	117
LCSD 880-40356/2-A	Lab Control Sample Dup	77	109
MB 880-40225/5-A	Method Blank	114	74
MB 880-40255/5-A	Method Blank	131 S1+	73
MB 880-40316/5-A	Method Blank	79	93
MB 880-40340/5-A	Method Blank	80	105
MB 880-40356/5-A	Method Blank	74	113

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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Surrogate Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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)
890-3472-A-1-C MS	Matrix Spike	94	83
890-3472-A-1-D MSD	Matrix Spike Duplicate	112	84
890-3486-1	S-1 (0-0.5)	99	116
890-3486-1 MS	S-1 (0-0.5)	106	107
890-3486-1 MSD	S-1 (0-0.5)	98	102
890-3486-2	S-1 (1-1.5)	111	134 S1+
890-3486-3	S-1 (2-2.5)	121	150 S1+
890-3486-4	S-1 (3-3.5)	112	133 S1+
890-3486-5	S-1 (4-4.5)	120	151 S1+
890-3486-6	S-2 (0-0.5)	101	116
890-3486-7	S-2 (1-1.5)	117	146 S1+
890-3486-8	S-2 (2-2.5)	125	152 S1+
890-3486-9	S-2 (3-3.5)	121	153 S1+
890-3486-10	S-2 (4-4.5)	110	133 S1+
890-3486-11	S-2 (5-5.5)	108	132 S1+
890-3486-12	S-3 (0-0.5)	102	121
890-3486-13	S-3 (1-1.5)	100	118
890-3486-14	S-3 (2-2.5)	126	156 S1+
890-3486-15	S-3 (3-3.5)	100	122
890-3486-16	S-3 (4-4.5)	113	144 S1+
890-3486-17	S-3 (5-5.5)	127	154 S1+
890-3486-18	H-1	121	154 S1+
890-3486-19	H-2	106	125
890-3486-20	H-3	108	129
890-3486-21	H-4	118	102
890-3486-22	H-5	89	85
890-3486-23	H-6	112	103
LCS 880-39929/2-A	Lab Control Sample	119	108
LCS 880-39931/2-A	Lab Control Sample	108	118
LCSD 880-39929/3-A	Lab Control Sample Dup	109	99
LCSD 880-39931/3-A	Lab Control Sample Dup	100	113
MB 880-39929/1-A	Method Blank	133 S1+	140 S1+
MB 880-39931/1-A	Method Blank	135 S1+	162 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40225/5-A

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40225

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 15:04	11/24/22 02:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 15:04	11/24/22 02:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 15:04	11/24/22 02:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 15:04	11/24/22 02:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 15:04	11/24/22 02:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 15:04	11/24/22 02:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	11/22/22 15:04	11/24/22 02:38	1
1,4-Difluorobenzene (Surr)	74		70 - 130	11/22/22 15:04	11/24/22 02:38	1

Lab Sample ID: MB 880-40255/5-A

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40255

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 16:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 16:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 16:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/24/22 16:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/22 17:58	11/24/22 16:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/22 17:58	11/24/22 16:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	11/22/22 17:58	11/24/22 16:08	1
1,4-Difluorobenzene (Surr)	73		70 - 130	11/22/22 17:58	11/24/22 16:08	1

Lab Sample ID: LCS 880-40255/1-A

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40255

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09458		mg/Kg		95	70 - 130
Toluene	0.100	0.1027		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09064		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.2000		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09615		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	180	S1+	70 - 130
1,4-Difluorobenzene (Surr)	72		70 - 130

Lab Sample ID: LCSD 880-40255/2-A

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40255

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1207		mg/Kg		121	70 - 130	24	35

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: LCSD 880-40255/2-A

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40255

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1208		mg/Kg		121	70 - 130	16	35
Ethylbenzene	0.100	0.1102		mg/Kg		110	70 - 130	19	35
m-Xylene & p-Xylene	0.200	0.2411		mg/Kg		121	70 - 130	19	35
o-Xylene	0.100	0.1159		mg/Kg		116	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	200	S1+	70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 890-3486-1 MS

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: S-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 40255

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.101	0.1282		mg/Kg		127	70 - 130
Toluene	<0.00201	U	0.101	0.1206		mg/Kg		120	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.1019		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.202	0.02416	F1	mg/Kg		11	70 - 130
o-Xylene	<0.00201	U	0.101	0.1126		mg/Kg		112	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	215	S1+	70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: 890-3486-1 MSD

Matrix: Solid

Analysis Batch: 40264

Client Sample ID: S-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 40255

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.1088		mg/Kg		109	70 - 130	16	35
Toluene	<0.00201	U	0.0996	0.1101		mg/Kg		110	70 - 130	9	35
Ethylbenzene	<0.00201	U	0.0996	0.09840		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.2007	F2	mg/Kg		100	70 - 130	157	35
o-Xylene	<0.00201	U	0.0996	0.1010		mg/Kg		101	70 - 130	11	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	199	S1+	70 - 130
1,4-Difluorobenzene (Surr)	74		70 - 130

Lab Sample ID: MB 880-40316/5-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/23/22 12:33	11/23/22 23:16	1

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: MB 880-40316/5-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40316

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/22 12:33	11/23/22 23:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130				11/23/22 12:33	11/23/22 23:16	1
1,4-Difluorobenzene (Surr)	93		70 - 130				11/23/22 12:33	11/23/22 23:16	1

Lab Sample ID: MB 880-40340/5-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/22 14:51	11/24/22 09:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				11/23/22 14:51	11/24/22 09:49	1
1,4-Difluorobenzene (Surr)	105		70 - 130				11/23/22 14:51	11/24/22 09:49	1

Lab Sample ID: LCS 880-40340/1-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1099		mg/Kg		110	70 - 130
Toluene	0.100	0.09245		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08415		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1680		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08555		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	90		70 - 130				
1,4-Difluorobenzene (Surr)	115		70 - 130				

Lab Sample ID: LCSD 880-40340/2-A

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40340

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1085		mg/Kg		109	70 - 130	1	35
Toluene	0.100	0.09171		mg/Kg		92	70 - 130	1	35
Ethylbenzene	0.100	0.08790		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1779		mg/Kg		89	70 - 130	6	35
o-Xylene	0.100	0.08965		mg/Kg		90	70 - 130	5	35

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: 890-3486-21 MS

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: H-4

Prep Type: Total/NA

Prep Batch: 40340

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.101	0.1037		mg/Kg		103	70 - 130
Toluene	<0.00201	U	0.101	0.08446		mg/Kg		83	70 - 130
Ethylbenzene	<0.00201	U	0.101	0.07870		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1560		mg/Kg		77	70 - 130
o-Xylene	<0.00201	U	0.101	0.07896		mg/Kg		78	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: 890-3486-21 MSD

Matrix: Solid

Analysis Batch: 40265

Client Sample ID: H-4

Prep Type: Total/NA

Prep Batch: 40340

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.09297		mg/Kg		94	70 - 130	11	35
Toluene	<0.00201	U	0.0994	0.07654		mg/Kg		76	70 - 130	10	35
Ethylbenzene	<0.00201	U	0.0994	0.06992		mg/Kg		70	70 - 130	12	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1377	F1	mg/Kg		69	70 - 130	12	35
o-Xylene	<0.00201	U	0.0994	0.07025		mg/Kg		70	70 - 130	12	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: MB 880-40356/5-A

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/25/22 17:09	11/25/22 21:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/25/22 17:09	11/25/22 21:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/25/22 17:09	11/25/22 21:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/25/22 17:09	11/25/22 21:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/25/22 17:09	11/25/22 21:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/25/22 17:09	11/25/22 21:25	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	74		70 - 130	11/25/22 17:09	11/25/22 21:25	1			
1,4-Difluorobenzene (Surr)	113		70 - 130	11/25/22 17:09	11/25/22 21:25	1			

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: LCS 880-40356/1-A

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09317		mg/Kg		93	70 - 130
Toluene	0.100	0.09649		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09226		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1655		mg/Kg		83	70 - 130
o-Xylene	0.100	0.08055		mg/Kg		81	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	78		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-40356/2-A

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09380		mg/Kg		94	70 - 130	1	35
Toluene	0.100	0.09688		mg/Kg		97	70 - 130	0	35
Ethylbenzene	0.100	0.09212		mg/Kg		92	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1646		mg/Kg		82	70 - 130	1	35
o-Xylene	0.100	0.07997		mg/Kg		80	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-3507-A-1-G MS

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40356

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.101	0.08379		mg/Kg		83	70 - 130
Toluene	<0.00202	U	0.101	0.08680		mg/Kg		86	70 - 130
Ethylbenzene	<0.00202	U	0.101	0.08327		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.202	0.1504		mg/Kg		75	70 - 130
o-Xylene	<0.00202	U	0.101	0.07248		mg/Kg		72	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-3507-A-1-H MSD

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08333		mg/Kg		84	70 - 130	1	35
Toluene	<0.00202	U	0.0996	0.08814		mg/Kg		88	70 - 130	2	35
Ethylbenzene	<0.00202	U	0.0996	0.08482		mg/Kg		85	70 - 130	2	35

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: 890-3507-A-1-H MSD

Matrix: Solid

Analysis Batch: 40358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00404	U	0.199	0.1518		mg/Kg		76	70 - 130	1	35
o-Xylene	<0.00202	U	0.0996	0.07386		mg/Kg		74	70 - 130	2	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	84		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-39929/1-A

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39929

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		11/18/22 13:39	11/21/22 20:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 13:39	11/21/22 20:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 13:39	11/21/22 20:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				11/18/22 13:39	11/21/22 20:36	1
o-Terphenyl	140	S1+	70 - 130				11/18/22 13:39	11/21/22 20:36	1

Lab Sample ID: LCS 880-39929/2-A

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1006		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	998.1		mg/Kg		100	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	108		70 - 130						

Lab Sample ID: LCSD 880-39929/3-A

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39929

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	976.6		mg/Kg		98	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	907.0		mg/Kg		91	70 - 130	10	20

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: LCSD 880-39929/3-A

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39929

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-3472-A-1-C MS

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 39929

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	996.2		mg/Kg		98	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1106		mg/Kg		111	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	94		70 - 130							
o-Terphenyl	83		70 - 130							

Lab Sample ID: 890-3472-A-1-D MSD

Matrix: Solid

Analysis Batch: 40028

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 39929

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1056		mg/Kg		104	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1133		mg/Kg		114	70 - 130	2	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	112		70 - 130									
o-Terphenyl	84		70 - 130									

Lab Sample ID: MB 880-39931/1-A

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39931

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 09:16	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 09:16	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/18/22 14:32	11/21/22 09:16	1		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
1-Chlorooctane	135	S1+	70 - 130				11/18/22 14:32	11/21/22 09:16	1		
o-Terphenyl	162	S1+	70 - 130				11/18/22 14:32	11/21/22 09:16	1		

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: LCS 880-39931/2-A

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39931

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1129		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1253		mg/Kg		125	70 - 130		

Lab Sample ID: LCSD 880-39931/3-A

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 39931

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1060		mg/Kg		106	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1196		mg/Kg		120	70 - 130	5	20
											</

Lab Sample ID: 890-3486-1 MS

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: S-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 39931

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	1619	F1	mg/Kg		162	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1135		mg/Kg		114	70 - 130		

Lab Sample ID: 890-3486-1 MSD

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: S-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 39931

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	997	1593	F1	mg/Kg		160	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1076		mg/Kg		108	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	98		70 - 130								

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

Lab Sample ID: 890-3486-1 MSD

Matrix: Solid

Analysis Batch: 40032

Client Sample ID: S-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 39931

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39830/1-A

Matrix: Solid

Analysis Batch: 40139

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			11/21/22 23:52		1

Lab Sample ID: LCS 880-39830/2-A

Matrix: Solid

Analysis Batch: 40139

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	256.0		mg/Kg		102	90 - 110	

Lab Sample ID: LCSD 880-39830/3-A

Matrix: Solid

Analysis Batch: 40139

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	256.0		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-3486-2 MS

Matrix: Solid

Analysis Batch: 40139

Client Sample ID: S-1 (1-1.5)

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	13.3		248	277.9		mg/Kg		107	90 - 110	

Lab Sample ID: 890-3486-2 MSD

Matrix: Solid

Analysis Batch: 40139

Client Sample ID: S-1 (1-1.5)

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	13.3		248	277.5		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-39831/1-A

Matrix: Solid

Analysis Batch: 40150

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			11/22/22 03:10		1

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QC Sample Results

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-39831/2-A

Matrix: Solid

Analysis Batch: 40150

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.5		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-39831/3-A

Matrix: Solid

Analysis Batch: 40150

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256.9		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3486-14 MS

Matrix: Solid

Analysis Batch: 40150

Client Sample ID: S-3 (2-2.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8610	F1	2500	10810	F1	mg/Kg		88	90 - 110

Lab Sample ID: 890-3486-14 MSD

Matrix: Solid

Analysis Batch: 40150

Client Sample ID: S-3 (2-2.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8610	F1	2500	10830	F1	mg/Kg		89	90 - 110	0	20

QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

GC VOA

Prep Batch: 40225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40225/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	5035	
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	5035	
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	5035	
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	5035	
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	5035	
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	5035	
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	5035	
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	5035	
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	5035	
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	5035	
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	5035	
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	5035	
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	5035	
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	5035	
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	5035	
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	5035	
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	5035	
890-3486-18	H-1	Total/NA	Solid	5035	
890-3486-20	H-3	Total/NA	Solid	5035	
MB 880-40255/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40255/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40255/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3486-1 MS	S-1 (0-0.5)	Total/NA	Solid	5035	
890-3486-1 MSD	S-1 (0-0.5)	Total/NA	Solid	5035	

Analysis Batch: 40264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	8021B	40255
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	8021B	40255
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	8021B	40255
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	8021B	40255
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	8021B	40255
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	8021B	40255
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	8021B	40255
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	8021B	40255
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	8021B	40255
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	8021B	40255
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	8021B	40255
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	8021B	40255
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	8021B	40255
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	8021B	40255
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	8021B	40255
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	8021B	40255
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	8021B	40255
890-3486-18	H-1	Total/NA	Solid	8021B	40255
890-3486-20	H-3	Total/NA	Solid	8021B	40255
MB 880-40225/5-A	Method Blank	Total/NA	Solid	8021B	40225

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

GC VOA (Continued)

Analysis Batch: 40264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40255/5-A	Method Blank	Total/NA	Solid	8021B	40255
LCS 880-40255/1-A	Lab Control Sample	Total/NA	Solid	8021B	40255
LCSD 880-40255/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40255
890-3486-1 MS	S-1 (0-0.5)	Total/NA	Solid	8021B	40255
890-3486-1 MSD	S-1 (0-0.5)	Total/NA	Solid	8021B	40255

Analysis Batch: 40265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-21	H-4	Total/NA	Solid	8021B	40340
890-3486-22	H-5	Total/NA	Solid	8021B	40340
890-3486-23	H-6	Total/NA	Solid	8021B	40340
MB 880-40316/5-A	Method Blank	Total/NA	Solid	8021B	40316
MB 880-40340/5-A	Method Blank	Total/NA	Solid	8021B	40340
LCS 880-40340/1-A	Lab Control Sample	Total/NA	Solid	8021B	40340
LCSD 880-40340/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40340
890-3486-21 MS	H-4	Total/NA	Solid	8021B	40340
890-3486-21 MSD	H-4	Total/NA	Solid	8021B	40340

Prep Batch: 40316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40316/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-21	H-4	Total/NA	Solid	5035	
890-3486-22	H-5	Total/NA	Solid	5035	
890-3486-23	H-6	Total/NA	Solid	5035	
MB 880-40340/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40340/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40340/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3486-21 MS	H-4	Total/NA	Solid	5035	
890-3486-21 MSD	H-4	Total/NA	Solid	5035	

Prep Batch: 40356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-19	H-2	Total/NA	Solid	5035	
MB 880-40356/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40356/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40356/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3507-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-3507-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-19	H-2	Total/NA	Solid	8021B	40356
MB 880-40356/5-A	Method Blank	Total/NA	Solid	8021B	40356
LCS 880-40356/1-A	Lab Control Sample	Total/NA	Solid	8021B	40356
LCSD 880-40356/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40356
890-3507-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	40356
890-3507-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40356

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

GC VOA

Analysis Batch: 40478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	Total BTEX	
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	Total BTEX	
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	Total BTEX	
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	Total BTEX	
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	Total BTEX	
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	Total BTEX	
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	Total BTEX	
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	Total BTEX	
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	Total BTEX	
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	Total BTEX	
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	Total BTEX	
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	Total BTEX	
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	Total BTEX	
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	Total BTEX	
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	Total BTEX	
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	Total BTEX	
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	Total BTEX	
890-3486-18	H-1	Total/NA	Solid	Total BTEX	
890-3486-19	H-2	Total/NA	Solid	Total BTEX	
890-3486-20	H-3	Total/NA	Solid	Total BTEX	
890-3486-21	H-4	Total/NA	Solid	Total BTEX	
890-3486-22	H-5	Total/NA	Solid	Total BTEX	
890-3486-23	H-6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-21	H-4	Total/NA	Solid	8015NM Prep	
890-3486-22	H-5	Total/NA	Solid	8015NM Prep	
890-3486-23	H-6	Total/NA	Solid	8015NM Prep	
MB 880-39929/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39929/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39929/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3472-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3472-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 39931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	8015NM Prep	
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	8015NM Prep	
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	8015NM Prep	
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	8015NM Prep	
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	8015NM Prep	
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	8015NM Prep	
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	8015NM Prep	
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	8015NM Prep	
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	8015NM Prep	
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

GC Semi VOA (Continued)

Prep Batch: 39931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	8015NM Prep	
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	8015NM Prep	
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	8015NM Prep	
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	8015NM Prep	
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	8015NM Prep	
890-3486-18	H-1	Total/NA	Solid	8015NM Prep	
890-3486-19	H-2	Total/NA	Solid	8015NM Prep	
890-3486-20	H-3	Total/NA	Solid	8015NM Prep	
MB 880-39931/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39931/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39931/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3486-1 MS	S-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
890-3486-1 MSD	S-1 (0-0.5)	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-21	H-4	Total/NA	Solid	8015B NM	39929
890-3486-22	H-5	Total/NA	Solid	8015B NM	39929
890-3486-23	H-6	Total/NA	Solid	8015B NM	39929
MB 880-39929/1-A	Method Blank	Total/NA	Solid	8015B NM	39929
LCS 880-39929/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39929
LCSD 880-39929/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39929
890-3472-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	39929
890-3472-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39929

Analysis Batch: 40032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	8015B NM	39931
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	8015B NM	39931
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	8015B NM	39931
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	8015B NM	39931
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	8015B NM	39931
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	8015B NM	39931
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	8015B NM	39931
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	8015B NM	39931
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	8015B NM	39931
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	8015B NM	39931
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	8015B NM	39931
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	8015B NM	39931
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	8015B NM	39931
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	8015B NM	39931
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	8015B NM	39931
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	8015B NM	39931
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	8015B NM	39931
890-3486-18	H-1	Total/NA	Solid	8015B NM	39931
890-3486-19	H-2	Total/NA	Solid	8015B NM	39931
890-3486-20	H-3	Total/NA	Solid	8015B NM	39931
MB 880-39931/1-A	Method Blank	Total/NA	Solid	8015B NM	39931
LCS 880-39931/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39931
LCSD 880-39931/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39931
890-3486-1 MS	S-1 (0-0.5)	Total/NA	Solid	8015B NM	39931

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

GC Semi VOA (Continued)

Analysis Batch: 40032 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1 MSD	S-1 (0-0.5)	Total/NA	Solid	8015B NM	39931

Analysis Batch: 40186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Total/NA	Solid	8015 NM	
890-3486-2	S-1 (1-1.5)	Total/NA	Solid	8015 NM	
890-3486-3	S-1 (2-2.5)	Total/NA	Solid	8015 NM	
890-3486-4	S-1 (3-3.5)	Total/NA	Solid	8015 NM	
890-3486-5	S-1 (4-4.5)	Total/NA	Solid	8015 NM	
890-3486-6	S-2 (0-0.5)	Total/NA	Solid	8015 NM	
890-3486-7	S-2 (1-1.5)	Total/NA	Solid	8015 NM	
890-3486-8	S-2 (2-2.5)	Total/NA	Solid	8015 NM	
890-3486-9	S-2 (3-3.5)	Total/NA	Solid	8015 NM	
890-3486-10	S-2 (4-4.5)	Total/NA	Solid	8015 NM	
890-3486-11	S-2 (5-5.5)	Total/NA	Solid	8015 NM	
890-3486-12	S-3 (0-0.5)	Total/NA	Solid	8015 NM	
890-3486-13	S-3 (1-1.5)	Total/NA	Solid	8015 NM	
890-3486-14	S-3 (2-2.5)	Total/NA	Solid	8015 NM	
890-3486-15	S-3 (3-3.5)	Total/NA	Solid	8015 NM	
890-3486-16	S-3 (4-4.5)	Total/NA	Solid	8015 NM	
890-3486-17	S-3 (5-5.5)	Total/NA	Solid	8015 NM	
890-3486-18	H-1	Total/NA	Solid	8015 NM	
890-3486-19	H-2	Total/NA	Solid	8015 NM	
890-3486-20	H-3	Total/NA	Solid	8015 NM	
890-3486-21	H-4	Total/NA	Solid	8015 NM	
890-3486-22	H-5	Total/NA	Solid	8015 NM	
890-3486-23	H-6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Soluble	Solid	DI Leach	
890-3486-2	S-1 (1-1.5)	Soluble	Solid	DI Leach	
890-3486-3	S-1 (2-2.5)	Soluble	Solid	DI Leach	
890-3486-4	S-1 (3-3.5)	Soluble	Solid	DI Leach	
890-3486-5	S-1 (4-4.5)	Soluble	Solid	DI Leach	
890-3486-6	S-2 (0-0.5)	Soluble	Solid	DI Leach	
890-3486-7	S-2 (1-1.5)	Soluble	Solid	DI Leach	
890-3486-8	S-2 (2-2.5)	Soluble	Solid	DI Leach	
890-3486-9	S-2 (3-3.5)	Soluble	Solid	DI Leach	
890-3486-10	S-2 (4-4.5)	Soluble	Solid	DI Leach	
890-3486-11	S-2 (5-5.5)	Soluble	Solid	DI Leach	
MB 880-39830/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39830/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39830/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3486-2 MS	S-1 (1-1.5)	Soluble	Solid	DI Leach	
890-3486-2 MSD	S-1 (1-1.5)	Soluble	Solid	DI Leach	

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

HPLC/IC

Leach Batch: 39831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-12	S-3 (0-0.5)	Soluble	Solid	DI Leach	
890-3486-13	S-3 (1-1.5)	Soluble	Solid	DI Leach	
890-3486-14	S-3 (2-2.5)	Soluble	Solid	DI Leach	
890-3486-15	S-3 (3-3.5)	Soluble	Solid	DI Leach	
890-3486-16	S-3 (4-4.5)	Soluble	Solid	DI Leach	
890-3486-17	S-3 (5-5.5)	Soluble	Solid	DI Leach	
890-3486-18	H-1	Soluble	Solid	DI Leach	
890-3486-19	H-2	Soluble	Solid	DI Leach	
890-3486-20	H-3	Soluble	Solid	DI Leach	
890-3486-21	H-4	Soluble	Solid	DI Leach	
890-3486-22	H-5	Soluble	Solid	DI Leach	
890-3486-23	H-6	Soluble	Solid	DI Leach	
MB 880-39831/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39831/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39831/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3486-14 MS	S-3 (2-2.5)	Soluble	Solid	DI Leach	
890-3486-14 MSD	S-3 (2-2.5)	Soluble	Solid	DI Leach	

Analysis Batch: 40139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-1	S-1 (0-0.5)	Soluble	Solid	300.0	39830
890-3486-2	S-1 (1-1.5)	Soluble	Solid	300.0	39830
890-3486-3	S-1 (2-2.5)	Soluble	Solid	300.0	39830
890-3486-4	S-1 (3-3.5)	Soluble	Solid	300.0	39830
890-3486-5	S-1 (4-4.5)	Soluble	Solid	300.0	39830
890-3486-6	S-2 (0-0.5)	Soluble	Solid	300.0	39830
890-3486-7	S-2 (1-1.5)	Soluble	Solid	300.0	39830
890-3486-8	S-2 (2-2.5)	Soluble	Solid	300.0	39830
890-3486-9	S-2 (3-3.5)	Soluble	Solid	300.0	39830
890-3486-10	S-2 (4-4.5)	Soluble	Solid	300.0	39830
890-3486-11	S-2 (5-5.5)	Soluble	Solid	300.0	39830
MB 880-39830/1-A	Method Blank	Soluble	Solid	300.0	39830
LCS 880-39830/2-A	Lab Control Sample	Soluble	Solid	300.0	39830
LCSD 880-39830/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39830
890-3486-2 MS	S-1 (1-1.5)	Soluble	Solid	300.0	39830
890-3486-2 MSD	S-1 (1-1.5)	Soluble	Solid	300.0	39830

Analysis Batch: 40150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3486-12	S-3 (0-0.5)	Soluble	Solid	300.0	39831
890-3486-13	S-3 (1-1.5)	Soluble	Solid	300.0	39831
890-3486-14	S-3 (2-2.5)	Soluble	Solid	300.0	39831
890-3486-15	S-3 (3-3.5)	Soluble	Solid	300.0	39831
890-3486-16	S-3 (4-4.5)	Soluble	Solid	300.0	39831
890-3486-17	S-3 (5-5.5)	Soluble	Solid	300.0	39831
890-3486-18	H-1	Soluble	Solid	300.0	39831
890-3486-19	H-2	Soluble	Solid	300.0	39831
890-3486-20	H-3	Soluble	Solid	300.0	39831
890-3486-21	H-4	Soluble	Solid	300.0	39831
890-3486-22	H-5	Soluble	Solid	300.0	39831
890-3486-23	H-6	Soluble	Solid	300.0	39831

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QC Association Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

HPLC/IC (Continued)

Analysis Batch: 40150 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39831/1-A	Method Blank	Soluble	Solid	300.0	39831
LCS 880-39831/2-A	Lab Control Sample	Soluble	Solid	300.0	39831
LCSD 880-39831/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39831
890-3486-14 MS	S-3 (2-2.5)	Soluble	Solid	300.0	39831
890-3486-14 MSD	S-3 (2-2.5)	Soluble	Solid	300.0	39831

Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (0-0.5)

Lab Sample ID: 890-3486-1

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 16:35	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 11:55	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 01:22	CH	EET MID

Client Sample ID: S-1 (1-1.5)

Lab Sample ID: 890-3486-2

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 17:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 12:58	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 01:28	CH	EET MID

Client Sample ID: S-1 (2-2.5)

Lab Sample ID: 890-3486-3

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 17:27	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 13:19	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 01:45	CH	EET MID

Client Sample ID: S-1 (3-3.5)

Lab Sample ID: 890-3486-4

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 17:54	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID

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Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-1 (3-3.5)

Lab Sample ID: 890-3486-4

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 13:41	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 01:51	CH	EET MID

Client Sample ID: S-1 (4-4.5)

Lab Sample ID: 890-3486-5

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 18:20	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 14:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 02:08	CH	EET MID

Client Sample ID: S-2 (0-0.5)

Lab Sample ID: 890-3486-6

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 18:46	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 14:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 02:13	CH	EET MID

Client Sample ID: S-2 (1-1.5)

Lab Sample ID: 890-3486-7

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 19:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 14:44	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (1-1.5)

Lab Sample ID: 890-3486-7

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40139	11/22/22 02:19	CH	EET MID

Client Sample ID: S-2 (2-2.5)

Lab Sample ID: 890-3486-8

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 19:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 15:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40139	11/22/22 02:24	CH	EET MID

Client Sample ID: S-2 (3-3.5)

Lab Sample ID: 890-3486-9

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 20:05	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 15:25	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40139	11/22/22 02:30	CH	EET MID

Client Sample ID: S-2 (4-4.5)

Lab Sample ID: 890-3486-10

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 20:31	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 15:47	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40139	11/22/22 02:36	CH	EET MID

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Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-2 (5-5.5)

Lab Sample ID: 890-3486-11

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 22:18	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 16:28	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39830	11/17/22 14:36	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40139	11/22/22 02:42	CH	EET MID

Client Sample ID: S-3 (0-0.5)

Lab Sample ID: 890-3486-12

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 22:44	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 16:50	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 04:35	CH	EET MID

Client Sample ID: S-3 (1-1.5)

Lab Sample ID: 890-3486-13

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 23:10	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 17:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 04:40	CH	EET MID

Client Sample ID: S-3 (2-2.5)

Lab Sample ID: 890-3486-14

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 23:36	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID

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Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (2-2.5)

Lab Sample ID: 890-3486-14

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 17:31	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 04:46	CH	EET MID

Client Sample ID: S-3 (3-3.5)

Lab Sample ID: 890-3486-15

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/25/22 00:02	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 17:52	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 05:03	CH	EET MID

Client Sample ID: S-3 (4-4.5)

Lab Sample ID: 890-3486-16

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/25/22 00:29	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 18:13	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 05:09	CH	EET MID

Client Sample ID: S-3 (5-5.5)

Lab Sample ID: 890-3486-17

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/25/22 00:56	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 18:33	SM	EET MID

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Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: S-3 (5-5.5)

Lab Sample ID: 890-3486-17

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	40150	11/22/22 05:26	CH	EET MID

Client Sample ID: H-1

Lab Sample ID: 890-3486-18

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/25/22 01:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 18:53	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:31	CH	EET MID

Client Sample ID: H-2

Lab Sample ID: 890-3486-19

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40356	11/25/22 17:09	EL	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	40358	11/25/22 22:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 19:14	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:37	CH	EET MID

Client Sample ID: H-3

Lab Sample ID: 890-3486-20

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40255	11/22/22 17:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/25/22 02:16	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 15:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39931	11/18/22 14:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40032	11/21/22 19:34	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:43	CH	EET MID

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Lab Chronicle

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Client Sample ID: H-4

Lab Sample ID: 890-3486-21

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 10:11	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39929	11/18/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40028	11/22/22 03:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:48	CH	EET MID

Client Sample ID: H-5

Lab Sample ID: 890-3486-22

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 10:31	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39929	11/18/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40028	11/22/22 03:23	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:54	CH	EET MID

Client Sample ID: H-6

Lab Sample ID: 890-3486-23

Date Collected: 11/15/22 00:00

Matrix: Solid

Date Received: 11/15/22 16:45

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	40340	11/23/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40265	11/24/22 10:52	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40478	11/28/22 16:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			40186	11/22/22 10:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39929	11/18/22 13:39	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40028	11/22/22 03:45	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39831	11/17/22 14:43	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40150	11/22/22 05:59	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

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

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

Sample Summary

Client: NT Global
Project/Site: Igloo 19 CTB

Job ID: 890-3486-1
SDG: Lea Co NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3486-1	S-1 (0-0.5)	Solid	11/15/22 00:00	11/15/22 16:45	0 - 0.5
890-3486-2	S-1 (1-1.5)	Solid	11/15/22 00:00	11/15/22 16:45	1 - 1.5
890-3486-3	S-1 (2-2.5)	Solid	11/15/22 00:00	11/15/22 16:45	2 - 2.5
890-3486-4	S-1 (3-3.5)	Solid	11/15/22 00:00	11/15/22 16:45	3 - 3.5
890-3486-5	S-1 (4-4.5)	Solid	11/15/22 00:00	11/15/22 16:45	4 - 4.5
890-3486-6	S-2 (0-0.5)	Solid	11/15/22 00:00	11/15/22 16:45	0 - 0.5
890-3486-7	S-2 (1-1.5)	Solid	11/15/22 00:00	11/15/22 16:45	1 - 1.5
890-3486-8	S-2 (2-2.5)	Solid	11/15/22 00:00	11/15/22 16:45	2 - 2.5
890-3486-9	S-2 (3-3.5)	Solid	11/15/22 00:00	11/15/22 16:45	3 - 3.5
890-3486-10	S-2 (4-4.5)	Solid	11/15/22 00:00	11/15/22 16:45	4 - 4.5
890-3486-11	S-2 (5-5.5)	Solid	11/15/22 00:00	11/15/22 16:45	5 - 5.5
890-3486-12	S-3 (0-0.5)	Solid	11/15/22 00:00	11/15/22 16:45	0 - 0.5
890-3486-13	S-3 (1-1.5)	Solid	11/15/22 00:00	11/15/22 16:45	1 - 1.5
890-3486-14	S-3 (2-2.5)	Solid	11/15/22 00:00	11/15/22 16:45	2 - 2.5
890-3486-15	S-3 (3-3.5)	Solid	11/15/22 00:00	11/15/22 16:45	3 - 3.5
890-3486-16	S-3 (4-4.5)	Solid	11/15/22 00:00	11/15/22 16:45	4 - 4.5
890-3486-17	S-3 (5-5.5)	Solid	11/15/22 00:00	11/15/22 16:45	5 - 5.5
890-3486-18	H-1	Solid	11/15/22 00:00	11/15/22 16:45	
890-3486-19	H-2	Solid	11/15/22 00:00	11/15/22 16:45	
890-3486-20	H-3	Solid	11/15/22 00:00	11/15/22 16:45	
890-3486-21	H-4	Solid	11/15/22 00:00	11/15/22 16:45	
890-3486-22	H-5	Solid	11/15/22 00:00	11/15/22 16:45	
890-3486-23	H-6	Solid	11/15/22 00:00	11/15/22 16:45	



Chain of Custody

Work Order No: _____

Page 1 of 3

Project Manager:		Gordon Banks		Bill to: (if different)			
Company Name:		NTG Environmental		Company Name:			
Address:		911 Regional Park Dr.		Address:			
City, State ZIP:		Houston, TX 77060		City, State ZIP:			
Phone:		281-682-7998		Email:			
Project Name:		Igloo 19 CTB		Turn Around			
Project Number:		226563		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code	
Project Location:		Lea Co. NM		Due Date:			
Sampler's Name:		Kellan Smith		TAT starts the day received by the lab, if received by 4:30pm			
PO #:							
SAMPLE RECEIPT		Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Parameters	
Received In tact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Thermometer ID: 72M-007			
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Correction Factor: -0.3			
Sample Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temperature Reading: 14.5			
Total Containers:		23		Corrected Temperature: 13.8			
Sample Identification		Date		Time		Soil	
S-1 (0-0.5)		15-Nov				Water	
S-1 (1-1.5)		15-Nov				cdmp 1	
S-1 (2-2.5)		15-Nov				cdmp 1	
S-1 (3-3.5)		15-Nov				cdmp 1	
S-1 (4-4.5)		15-Nov				cdmp 1	
S-2 (0-0.5)		15-Nov				cdmp 1	
S-2 (1-1.5)		15-Nov				cdmp 1	
S-2 (2-2.5)		15-Nov				cdmp 1	
S-2 (3-3.5)		15-Nov				cdmp 1	
S-2 (4-4.5)		15-Nov				cdmp 1	
Additional Comments:							
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.							
Relinquished by: (Signature)		Received by: (Signature)		Date/Time		Relinquished by: (Signature)	
1		2		11-15-22 1645		4	
3		4				6	
5		6					



HOLD

890-3486 Chain of Custody

ANALYSIS REQUEST

Preservative Codes

Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____	



Chain of Custody

Work Order No: _____

Page 2 of 3

Project Manager:	Gordon Banks	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	911 Regional Park Dr.	Address:	
City, State ZIP:	Houston, TX 77060	City, State ZIP:	
Phone:	281-682-7998	Email:	

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Iqloo 19 CTB	Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes				
Project Number:	226569	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush													None: NO	DI Water: H ₂ O		
Project Location:	Lea Co. NM	Due Date:														Cool: Cool	MeOH: Me		
Sampler's Name:	Kellan Smith	TAT starts the day received by the lab if received by 4:30pm														HCL: HC	HNO ₃ : HN		
PO #:																H ₂ SO ₄ : H ₂	NaOH: Na		
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No											H ₃ PO ₄ : HP	
Received Inlet:	Yes	No	Thermometer/D:															NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes	No	Correction Factor:															Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes	No	Temperature Reading:															Zn Acetate+NaOH: Zn	
Total Containers:	23		Corrected Temperature:															NaOH+Ascorbic Acid: SAPC	

Sample Identification	Date	Time	Soil	Water	# of Cont	Parameters										Sample Comments	
						BTEX 8021B	TPH 8015M (GRO + DRO + MRO)	Chloride 4500									
S-2 (5-5.5)	15-Nov		X	comp	1	X	X	X									
S-3 (0-0.5)	15-Nov		X	comp	1	X	X	X									
S-3 (1-1.5)	15-Nov		X	comp	1	X	X	X									
S-3 (2-2.5)	15-Nov		X	comp	1	X	X	X									
S-3 (3-3.5)	15-Nov		X	comp	1	X	X	X									
S-3 (4-4.5)	15-Nov		X	comp	1	X	X	X									
S-3 (5-5.5)	15-Nov		X	comp	1	X	X	X									
H-1	15-Nov		X	comp	1	X	X	X									
H-2	15-Nov		X	comp	1	X	X	X									
H-3	15-Nov		X	comp	1	X	X	X									

Additional Comments:

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$3.00 to 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
		11-15-20 16:45			



Chain of Custody

Work Order No:

Page 3 of 3[illegible]

Login Sample Receipt Checklist

Client: NT Global

Job Number: 890-3486-1

SDG Number: Lea Co NM

Login Number: 3486

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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.	N/A	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: NT Global

Job Number: 890-3486-1

SDG Number: Lea Co NM

Login Number: 3486

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/17/22 02:07 PM

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	



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

January 18, 2023

ETHAN SESSUMS

NTG ENVIRONMENTAL

701 TRADEWINDS BLVD. SUITE C

MIDLAND, TX 79706

RE: IGLOO 1A CTB

Enclosed are the results of analyses for samples received by the laboratory on 01/13/23 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 1 (6') (H230205-01)

BTX 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	01/18/2023	ND	2.00	100	2.00	12.4	
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7	
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7	
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4	
Total BTX	<0.300	0.300	01/18/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69		

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	01/16/2023	ND	206	103	200	3.27	
DRO >C10-C28*	<10.0	10.0	01/16/2023	ND	227	114	200	0.813	
EXT DRO >C28-C36	<10.0	10.0	01/16/2023	ND					

Surrogate: 1-Chlorooctane 96.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 1 (7') (H230205-02)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEx	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500CI-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	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 92.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (6') (H230205-03)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEx	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	848	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 85.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (7') (H230205-04)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEX	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (8') (H230205-05)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEx	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1840	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (9') (H230205-06)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEx	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4080	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 83.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (10') (H230205-07)

BTX 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	01/18/2023	ND	2.00	100	2.00	12.4	
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7	
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7	
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4	
Total BTEX	<0.300	0.300	01/18/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 2 (11') (H230205-08)

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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTEX	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

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	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 3 (6') (H230205-09)

BTX 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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTX	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
 ETHAN SESSUMS
 701 TRADEWINDS BLVD. SUITE C
 MIDLAND TX, 79706
 Fax To:

Received: 01/13/2023
 Reported: 01/18/2023
 Project Name: IGLOO 1A CTB
 Project Number: 226568
 Project Location: LEA CO., NM

Sampling Date: 01/13/2023
 Sampling Type: Soil
 Sampling Condition: ** (See Notes)
 Sample Received By: Shalyn Rodriguez

Sample ID: TP - 3 (7') (H230205-10)

BTX 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	01/18/2023	ND	2.00	100	2.00	12.4		
Toluene*	<0.050	0.050	01/18/2023	ND	2.03	101	2.00	12.7		
Ethylbenzene*	<0.050	0.050	01/18/2023	ND	1.98	98.8	2.00	13.7		
Total Xylenes*	<0.150	0.150	01/18/2023	ND	6.12	102	6.00	13.4		
Total BTX	<0.300	0.300	01/18/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	01/16/2023	ND	400	100	400	7.69		

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	01/17/2023	ND	191	95.5	200	0.0560	
DRO >C10-C28*	<10.0	10.0	01/17/2023	ND	179	89.4	200	1.63	
EXT DRO >C28-C36	<10.0	10.0	01/17/2023	ND					

Surrogate: 1-Chlorooctane 90.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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

Celey D. Keene, Lab Director/Quality Manager



Chain of Custody

Work Order No: 49300005

Page 1 of 1

Project Manager:	Ethan Sessums	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	402 East Wood Avenue.	Address:	
City, State ZIP:	Carlsbad, New Mexico 88220	City, State ZIP:	
Phone:	432-701-2159	Email:	NTG Mailing List

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Tgloo 19 CTB		Turn Around	Pres. Code	ANALYSIS REQUEST										Preservative Codes			
Project Number:	226568		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush													None: NO	DI Water: H ₂ O	
Project Location:	Kearney NM		Due Date:													Cool: Cool	MeOH: Me	
Sampler's Name:	Fellon Smith		TAT starts the day received by the lab, if received by 4:30pm													HCL: HC	HNO ₃ : HN	
PO #:																H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>												H ₃ PO ₄ : HP		
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	113													NaHSO ₄ : NABIS		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:	-0.06°C													Na ₂ S ₂ O ₅ : NaSO ₃		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:	20.8°C													Zn Acetate+NaOH: Zn		
Total Containers:			Corrected Temperature:	20.8°C												NaOH+Ascorbic Acid: SAPC		
Sample Identification	Date	Time	Soil	Water	(Grab) Comp	# of Cont											Sample Comments	
TP-1 (6')	1-13-23						BTX 8021B										1	
TP-1 (7')							TPH 8015M (GRO + DRO + MRO)										2	
TP-2 (6')							Chloride 4500										3	
TP-2 (7')																	4	
TP-2 (8')																	5	
TP-2 (9')																	6	
TP-2 (10')																	7	
TP-2 (11')																	8	
TP-3 (6')																	9	
TP-3 (7')																	10	

Additional Comments:

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>[Signature]</u>	<u>[Signature]</u>	1-13-23 1440			

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

March 23, 2023

ETHAN SESSUMS

NTG ENVIRONMENTAL

701 TRADEWINDS BLVD. SUITE C

MIDLAND, TX 79706

RE: IGLOO 19 CTB

Enclosed are the results of analyses for samples received by the laboratory on 03/20/23 15:34.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CS - 1 (10')	H231251-01	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 2 (10')	H231251-02	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 3 (10')	H231251-03	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 4 (10')	H231251-04	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 5 (10')	H231251-05	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 6 (10')	H231251-06	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 7 (10')	H231251-07	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 8 (10')	H231251-08	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 9 (10')	H231251-09	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 10 (10')	H231251-10	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 11 (6')	H231251-11	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 12 (6')	H231251-12	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 13 (6')	H231251-13	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 14 (6')	H231251-14	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 15 (6')	H231251-15	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 16 (6')	H231251-16	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 17 (6')	H231251-17	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 18 (6')	H231251-18	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 19 (6')	H231251-19	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 20 (6')	H231251-20	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 21 (6')	H231251-21	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 22 (6')	H231251-22	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 23 (6')	H231251-23	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 24 (6')	H231251-24	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 25 (6')	H231251-25	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 26 (6')	H231251-26	Soil	20-Mar-23 00:00	20-Mar-23 15:34
CS - 27 (6')	H231251-27	Soil	20-Mar-23 00:00	20-Mar-23 15:34

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 1 (0-10')	H231251-28	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 2 (0-10')	H231251-29	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 3 (0-10')	H231251-30	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 4 (0-10')	H231251-31	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 5 (0-10')	H231251-32	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 6 (0-10')	H231251-33	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 7 (0-10')	H231251-34	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 8 (6-10')	H231251-35	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 9 (6-10')	H231251-36	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 10 (0-6')	H231251-37	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 11 (0-6')	H231251-38	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 12 (0-6')	H231251-39	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 13 (0-6')	H231251-40	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 14 (0-6')	H231251-41	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 15 (0-6')	H231251-42	Soil	20-Mar-23 00:00	20-Mar-23 15:34
SW - 16 (0-6')	H231251-43	Soil	20-Mar-23 00:00	20-Mar-23 15:34

03/23/23 - A typo was made on the project name at login. This is the revised report and will replace the one sent earlier today 03/23/23.

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 1 (10')
H231251-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane 97.9 % 48.2-134 3032127 MS 22-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 102 % 49.1-148 3032127 MS 22-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 2 (10')
H231251-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	240		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			106 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			93.8 %	48.2-134		3032127	MS	22-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			96.3 %	49.1-148		3032127	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 3 (10')
H231251-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	112		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			106 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			88.9 %	48.2-134		3032127	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			90.2 %	49.1-148		3032127	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 4 (10')
H231251-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032127	MS	22-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			88.4 %	48.2-134		3032127	MS	22-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			90.8 %	49.1-148		3032127	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 5 (10')
H231251-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	96.0		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 87.4 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 113 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 6 (10')
H231251-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			80.3 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			105 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 7 (10')
H231251-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			104 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			89.1 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			112 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 8 (10')
H231251-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 96.8 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 128 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 9 (10')
H231251-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	96.0		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			108 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			83.0 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			109 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 10 (10')
H231251-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	112		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			110 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			93.3 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			120 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 11 (6')
H231251-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	112		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %		71.5-134	3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			83.8 %		48.2-134	3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			109 %		49.1-148	3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 12 (6')
H231251-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	368		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			105 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			98.1 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			127 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 13 (6')
H231251-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	352		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			109 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			92.4 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			122 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 14 (6')
H231251-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	160		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			105 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			93.0 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			121 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 15 (6')
H231251-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 92.3 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 119 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 16 (6')
H231251-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	240		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			91.7 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			119 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 17 (6')
H231251-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 93.3 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 120 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 18 (6')
H231251-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			110 %	71.5-134		3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			85.5 %	48.2-134		3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			109 %	49.1-148		3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 19 (6')
H231251-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134 3032135 JH/ 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 88.7 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 114 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 20 (6')
H231251-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032224	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032135	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032135	JH/	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %		71.5-134	3032135	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			88.0 %		48.2-134	3032130	MS	21-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			113 %		49.1-148	3032130	MS	21-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 21 (6')
H231251-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	QM-07
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	QM-07
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134 3032141 JH 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	21-Mar-23	8015B	

Surrogate: 1-Chlorooctane 72.2 % 48.2-134 3032130 MS 21-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148 3032130 MS 21-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 22 (6')
H231251-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	208		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			107 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			82.9 %	48.2-134		3032130	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			112 %	49.1-148		3032130	MS	22-Mar-23	8015B	
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Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 23 (6')
H231251-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			79.5 %	48.2-134		3032130	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			104 %	49.1-148		3032130	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 24 (6')
H231251-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032130	MS	22-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			77.0 %	48.2-134		3032130	MS	22-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			101 %	49.1-148		3032130	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 25 (6')
H231251-25 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	144		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			107 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			91.8 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			107 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 26 (6')
H231251-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			96.0 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			110 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

CS - 27 (6')
H231251-27 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	176		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134 3032141 JH 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane 92.4 % 48.2-134 3032131 MS 22-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 108 % 49.1-148 3032131 MS 22-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 1 (0-10')**H231251-28 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			92.0 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			107 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 2 (0-10')**H231251-29 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			97.2 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			114 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 3 (0-10')**H231251-30 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	48.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			102 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			119 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 4 (0-10")**H231251-31 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			107 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			103 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			122 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 5 (0-10')**H231251-32 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			98.4 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			115 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 6 (0-10')**H231251-33 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			91.9 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			107 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 7 (0-10')**H231251-34 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			85.8 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			99.8 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 8 (6-10')**H231251-35 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			88.7 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			103 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 9 (6-10')**H231251-36 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			107 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			93.1 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			109 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 10 (0-6')**H231251-37 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	80.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			86.4 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			101 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 11 (0-6')**H231251-38 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			97.3 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			113 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 12 (0-6")**H231251-39 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032141	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032141	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			108 %	71.5-134		3032141	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			88.6 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			103 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 13 (0-6')**H231251-40 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	3032225	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032213	JH/	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032213	JH/	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032213	JH/	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032213	JH/	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032213	JH/	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			104 %	71.5-134		3032213	JH/	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			99.5 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			116 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 14 (0-6")**H231251-41 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	64.0		16.0	mg/kg	4	3032226	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	QM-07
Total Xylenes*	<0.150		0.150	mg/kg	50	3032142	JH	22-Mar-23	8021B	QM-07
Total BTEX	<0.300		0.300	mg/kg	50	3032142	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134 3032142 JH 22-Mar-23 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane 95.4 % 48.2-134 3032131 MS 22-Mar-23 8015B

Surrogate: 1-Chlorooctadecane 111 % 49.1-148 3032131 MS 22-Mar-23 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 15 (0-6")**H231251-42 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3032226	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032142	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			122 %	71.5-134		3032142	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			97.2 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			114 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

SW - 16 (0-6")**H231251-43 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3032226	AC	22-Mar-23	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3032142	JH	22-Mar-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3032142	JH	22-Mar-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			112 %	71.5-134		3032142	JH	22-Mar-23	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3032131	MS	22-Mar-23	8015B	

Surrogate: 1-Chlorooctane			93.6 %	48.2-134		3032131	MS	22-Mar-23	8015B	
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Surrogate: 1-Chlorooctadecane			108 %	49.1-148		3032131	MS	22-Mar-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032224 - 1:4 DI Water**Blank (3032224-BLK1)**

Prepared & Analyzed: 22-Mar-23

Chloride	ND	16.0	mg/kg
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LCS (3032224-BS1)

Prepared & Analyzed: 22-Mar-23

Chloride	448	16.0	mg/kg	400	112	80-120
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LCS Dup (3032224-BSD1)

Prepared & Analyzed: 22-Mar-23

Chloride	448	16.0	mg/kg	400	112	80-120	0.00	20
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Batch 3032225 - 1:4 DI Water**Blank (3032225-BLK1)**

Prepared & Analyzed: 22-Mar-23

Chloride	ND	16.0	mg/kg
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LCS (3032225-BS1)

Prepared & Analyzed: 22-Mar-23

Chloride	432	16.0	mg/kg	400	108	80-120
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LCS Dup (3032225-BSD1)

Prepared & Analyzed: 22-Mar-23

Chloride	448	16.0	mg/kg	400	112	80-120	3.64	20
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Batch 3032226 - 1:4 DI Water**Blank (3032226-BLK1)**

Prepared & Analyzed: 22-Mar-23

Chloride	ND	16.0	mg/kg
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LCS (3032226-BS1)

Prepared & Analyzed: 22-Mar-23

Chloride	432	16.0	mg/kg	400	108	80-120
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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032226 - 1:4 DI Water**LCS Dup (3032226-BSD1)**

Prepared & Analyzed: 22-Mar-23

Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	
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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032135 - Volatiles**Blank (3032135-BLK1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0509		mg/kg	0.0500		102	71.5-134			

LCS (3032135-BS1)

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	2.05	0.050	mg/kg	2.00		102	81.4-118			
Toluene	2.09	0.050	mg/kg	2.00		104	88.7-121			
Ethylbenzene	2.12	0.050	mg/kg	2.00		106	86.1-120			
m,p-Xylene	4.34	0.100	mg/kg	4.00		109	88.2-124			
o-Xylene	2.07	0.050	mg/kg	2.00		104	84.9-118			
Total Xylenes	6.41	0.150	mg/kg	6.00		107	87.3-122			
Surrogate: 4-Bromofluorobenzene (PID)	0.0507		mg/kg	0.0500		101	71.5-134			

LCS Dup (3032135-BS1)

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	1.96	0.050	mg/kg	2.00		97.9	81.4-118	4.55	15.8	
Toluene	2.07	0.050	mg/kg	2.00		104	88.7-121	0.877	15.9	
Ethylbenzene	2.05	0.050	mg/kg	2.00		102	86.1-120	3.46	16	
m,p-Xylene	4.15	0.100	mg/kg	4.00		104	88.2-124	4.45	16.2	
o-Xylene	1.96	0.050	mg/kg	2.00		97.9	84.9-118	5.61	16.7	
Total Xylenes	6.11	0.150	mg/kg	6.00		102	87.3-122	4.82	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0482		mg/kg	0.0500		96.5	71.5-134			

Batch 3032141 - Volatiles**Blank (3032141-BLK1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032141 - Volatiles**Blank (3032141-BLK1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0541		mg/kg	0.0500		108	71.5-134			

LCS (3032141-BS1)

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	2.11	0.050	mg/kg	2.00		106	81.4-118			
Toluene	2.13	0.050	mg/kg	2.00		106	88.7-121			
Ethylbenzene	2.22	0.050	mg/kg	2.00		111	86.1-120			
m,p-Xylene	4.59	0.100	mg/kg	4.00		115	88.2-124			
o-Xylene	2.23	0.050	mg/kg	2.00		112	84.9-118			
Total Xylenes	6.82	0.150	mg/kg	6.00		114	87.3-122			
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	71.5-134			

LCS Dup (3032141-BS1)

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	2.08	0.050	mg/kg	2.00		104	81.4-118	1.40	15.8	
Toluene	2.11	0.050	mg/kg	2.00		105	88.7-121	1.09	15.9	
Ethylbenzene	2.20	0.050	mg/kg	2.00		110	86.1-120	1.04	16	
m,p-Xylene	4.56	0.100	mg/kg	4.00		114	88.2-124	0.696	16.2	
o-Xylene	2.17	0.050	mg/kg	2.00		109	84.9-118	2.73	16.7	
Total Xylenes	6.73	0.150	mg/kg	6.00		112	87.3-122	1.36	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0520		mg/kg	0.0500		104	71.5-134			

Batch 3032142 - Volatiles**Blank (3032142-BLK1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0618		mg/kg	0.0500		124	71.5-134			

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032142 - Volatiles**LCS (3032142-BS1)**

Prepared: 21-Mar-23 Analyzed: 23-Mar-23

Benzene	2.22	0.050	mg/kg	2.00		111	81.4-118			
Toluene	2.32	0.050	mg/kg	2.00		116	88.7-121			
Ethylbenzene	2.45	0.050	mg/kg	2.00		122	86.1-120			BS-3
m,p-Xylene	5.10	0.100	mg/kg	4.00		127	88.2-124			BS-3
o-Xylene	2.53	0.050	mg/kg	2.00		127	84.9-118			BS-3
Total Xylenes	7.63	0.150	mg/kg	6.00		127	87.3-122			BS-3
Surrogate: 4-Bromofluorobenzene (PID)	0.0549		mg/kg	0.0500		110	71.5-134			

LCS Dup (3032142-BSD1)

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

Benzene	2.18	0.050	mg/kg	2.00		109	81.4-118	1.78	15.8	
Toluene	2.31	0.050	mg/kg	2.00		116	88.7-121	0.470	15.9	
Ethylbenzene	2.48	0.050	mg/kg	2.00		124	86.1-120	1.52	16	BS-3
m,p-Xylene	5.14	0.100	mg/kg	4.00		129	88.2-124	0.968	16.2	BS-3
o-Xylene	2.58	0.050	mg/kg	2.00		129	84.9-118	1.66	16.7	BS-3
Total Xylenes	7.72	0.150	mg/kg	6.00		129	87.3-122	1.20	16.3	BS-3
Surrogate: 4-Bromofluorobenzene (PID)	0.0610		mg/kg	0.0500		122	71.5-134			

Batch 3032213 - Volatiles**Blank (3032213-BLK1)**

Prepared & Analyzed: 22-Mar-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0530		mg/kg	0.0500		106	71.5-134			

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032213 - Volatiles**LCS (3032213-BS1)**

Prepared & Analyzed: 22-Mar-23

Benzene	2.08	0.050	mg/kg	2.00		104	81.4-118		
Toluene	2.13	0.050	mg/kg	2.00		107	88.7-121		
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	86.1-120		
m,p-Xylene	4.35	0.100	mg/kg	4.00		109	88.2-124		
o-Xylene	2.03	0.050	mg/kg	2.00		101	84.9-118		
Total Xylenes	6.38	0.150	mg/kg	6.00		106	87.3-122		
Surrogate: 4-Bromofluorobenzene (PID)	0.0514		mg/kg	0.0500		103	71.5-134		

LCS Dup (3032213-BS1)

Prepared & Analyzed: 22-Mar-23

Benzene	1.97	0.050	mg/kg	2.00		98.7	81.4-118	5.36	15.8
Toluene	2.06	0.050	mg/kg	2.00		103	88.7-121	3.51	15.9
Ethylbenzene	2.04	0.050	mg/kg	2.00		102	86.1-120	4.63	16
m,p-Xylene	4.21	0.100	mg/kg	4.00		105	88.2-124	3.37	16.2
o-Xylene	2.02	0.050	mg/kg	2.00		101	84.9-118	0.487	16.7
Total Xylenes	6.23	0.150	mg/kg	6.00		104	87.3-122	2.44	16.3
Surrogate: 4-Bromofluorobenzene (PID)	0.0496		mg/kg	0.0500		99.2	71.5-134		

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032127 - General Prep - Organics**Blank (3032127-BLK1)**

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	55.9		mg/kg	50.0		112	48.2-134			
Surrogate: 1-Chlorooctadecane	60.4		mg/kg	50.0		121	49.1-148			

LCS (3032127-BS1)

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	156	10.0	mg/kg	200		78.2	78.5-124			BS-3
DRO >C10-C28	158	10.0	mg/kg	200		79.0	72.5-126			
Total TPH C6-C28	314	10.0	mg/kg	400		78.6	77.6-123			
Surrogate: 1-Chlorooctane	48.7		mg/kg	50.0		97.5	48.2-134			
Surrogate: 1-Chlorooctadecane	54.0		mg/kg	50.0		108	49.1-148			

LCS Dup (3032127-BS1)

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	177	10.0	mg/kg	200		88.4	78.5-124	12.3	17.7	
DRO >C10-C28	187	10.0	mg/kg	200		93.3	72.5-126	16.7	21	
Total TPH C6-C28	363	10.0	mg/kg	400		90.9	77.6-123	14.5	18.5	
Surrogate: 1-Chlorooctane	53.5		mg/kg	50.0		107	48.2-134			
Surrogate: 1-Chlorooctadecane	62.5		mg/kg	50.0		125	49.1-148			

Batch 3032130 - General Prep - Organics**Blank (3032130-BLK1)**

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	47.5		mg/kg	50.0		95.1	48.2-134			
Surrogate: 1-Chlorooctadecane	62.5		mg/kg	50.0		125	49.1-148			

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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032130 - General Prep - Organics**LCS (3032130-BS1)**

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	166	10.0	mg/kg	200		83.2	78.5-124			
DRO >C10-C28	195	10.0	mg/kg	200		97.4	72.5-126			
Total TPH C6-C28	361	10.0	mg/kg	400		90.3	77.6-123			
Surrogate: 1-Chlorooctane	48.8		mg/kg	50.0		97.6	48.2-134			
Surrogate: 1-Chlorooctadecane	63.1		mg/kg	50.0		126	49.1-148			

LCS Dup (3032130-BS1)

Prepared & Analyzed: 21-Mar-23

GRO C6-C10	165	10.0	mg/kg	200		82.3	78.5-124	1.09	17.7	
DRO >C10-C28	184	10.0	mg/kg	200		91.9	72.5-126	5.83	21	
Total TPH C6-C28	348	10.0	mg/kg	400		87.1	77.6-123	3.62	18.5	
Surrogate: 1-Chlorooctane	46.2		mg/kg	50.0		92.4	48.2-134			
Surrogate: 1-Chlorooctadecane	58.8		mg/kg	50.0		118	49.1-148			

Batch 3032131 - General Prep - Organics**Blank (3032131-BLK1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	59.2		mg/kg	50.0		118	48.2-134			
Surrogate: 1-Chlorooctadecane	70.2		mg/kg	50.0		140	49.1-148			

LCS (3032131-BS1)

Prepared: 21-Mar-23 Analyzed: 23-Mar-23

GRO C6-C10	170	10.0	mg/kg	200		84.9	78.5-124			
DRO >C10-C28	184	10.0	mg/kg	200		92.1	72.5-126			
Total TPH C6-C28	354	10.0	mg/kg	400		88.5	77.6-123			
Surrogate: 1-Chlorooctane	47.6		mg/kg	50.0		95.1	48.2-134			
Surrogate: 1-Chlorooctadecane	57.6		mg/kg	50.0		115	49.1-148			

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Analytical Results For:

NTG ENVIRONMENTAL
701 TRADEWINDS BLVD. SUITE C
MIDLAND TX, 79706

Project: IGLOO 19 CTB
Project Number: 226568
Project Manager: ETHAN SESSUMS
Fax To:

Reported:
23-Mar-23 18:34

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3032131 - General Prep - Organics**LCS Dup (3032131-BSD1)**

Prepared: 21-Mar-23 Analyzed: 22-Mar-23

GRO C6-C10	157	10.0	mg/kg	200		78.7	78.5-124	7.62	17.7	
DRO >C10-C28	164	10.0	mg/kg	200		81.8	72.5-126	11.9	21	
Total TPH C6-C28	321	10.0	mg/kg	400		80.3	77.6-123	9.81	18.5	
Surrogate: 1-Chlorooctane	49.2		mg/kg	50.0		98.5	48.2-134			
Surrogate: 1-Chlorooctadecane	60.3		mg/kg	50.0		121	49.1-148			

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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

Celey D. Keene, Lab Director/Quality Manager



Chain of Custody

Work Order No: H23/251Page 1 of 5

Project Manager:	Ethan Sessums	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	402 E Wood Ave	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	254-266-5456	Email:	

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Rowfields <input type="checkbox"/> RC <input type="checkbox"/> s <input type="checkbox"/> Pertund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Igloo 19 CTB	Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes		
Project Number:	226568	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush														None: NO		
Project Location:	Lea Co. NM	Due Date:	TAT starts the day received by the lab, if received by 4:30pm												DI Water: H ₂ O				
Sampler's Name:	Kellan Smith													Cool: Cool					
PO #														HCL: HC					
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>													H ₂ SO ₄ : H ₂	
Received intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	113												H ₃ PO ₄ : HP				
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Correction Factor:	-0.6												NaHSO ₄ : NABIS				
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Temperature Reading:	5.8												Na ₂ S ₂ O ₃ : NaSO ₃				
Total Containers:		Corrected Temperature:	5.2												Zn Acetate+NaOH: Zn				
														NaOH+Ascorbic Acid: SAPC					
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont													Sample Comments
CS-1 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-2 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-3 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-4 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-5 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-6 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-7 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-8 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-9 (10')	3/20/2023		X		Comp	1	X	X	X	X									
CS-10 (10')	3/20/2023		X		Comp	1	X	X	X	X									

Additional Comments:

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time



Chain of Custody

Work Order No: A231251

Page 2 of 5

Project Manager:	Ethan Sessums	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	402 E Wood Ave	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	254-266-5456	Email:	

Work Order Comments	
Program: UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Lowfields <input type="checkbox"/> RC <input type="checkbox"/> S <input type="checkbox"/> Pertund <input type="checkbox"/>	
State of Project:	
Reporting Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Igloo 19 CTB	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST										Preservative Codes	
Project Number:	226568	Due Date:														None: NO	DI Water: H ₂ O
Project Location:	Lea Co. NM	TAT starts the day received by the lab, if received by 4:30pm														Cool: Cool	MeOH: Me
Sampler's Name:	Kellan Smith															HCL: HC	HNO ₃ : HN
PO #:																H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Parameters											H ₃ PO ₄ : HP	
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:			BTEX 8021B											NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Correction Factor:			TPH 8015M (GRO + DRO + MRO)											Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Temperature Reading:			Chloride 4500											Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:														NaOH+Ascorbic Acid: SAPC	
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont											Sample Comments
CS-11 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-12 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-13 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-14 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-15 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-16 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-17 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-18 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-19 (6')	3/20/2023		X		Comp	1	X	X	X	X							
CS-20 (6')	3/20/2023		X		Comp	1	X	X	X	X							

Additional Comments:

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>[Signature]</u>	<u>[Signature]</u>	3-20-23 1534 ¹²			



Chain of Custody

Work Order No:

H231251

Page 3 of 5

Project Manager:	Ethan Sessums	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	402 E Wood Ave	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	254-266-5456	Email:	

Work Order Comments	
Program: UST/PS T	<input type="checkbox"/> RP <input type="checkbox"/> Downfields <input type="checkbox"/> RC <input type="checkbox"/> s <input type="checkbox"/> erfund
State of Project:	
Reporting Level I	<input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	Igloo 19 CTB	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST												Preservative Codes		
Project Number:	226568	Due Date:																None: NO DI Water: H ₂ O		
Project Location:	Lea Co. NM	TAT starts the day received by the lab, if received by 4:30pm																Cool: Cool MeOH: Me		
Sampler's Name:	Kellian Smith																	HCL: HC HNO ₃ : HN		
PO #:																		H ₂ SO ₄ : H ₂ NaOH: Na		
SAMPLE RECEIPT	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														H ₃ PO ₄ : HP		
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:																NaHSO ₄ : NABIS		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:																Zn Acetate+NaOH: Zn		
Total Containers:		Corrected Temperature:																NaOH+Ascorbic Acid: S&P		
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont													Sample Comments	
CS-21 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-22 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-23 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-24 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-25 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-26 (6)	3/20/2023		X		Comp	1	X	X	X											
CS-27 (6)	3/20/2023		X		Comp	1	X	X	X											
SW-1 (0-10')	3/20/2023		X		Comp	1	X	X	X											
SW-2 (0-10')	3/20/2023		X		Comp	1	X	X	X											
SW-3 (0-10')	3/20/2023		X		Comp	1	X	X	X											

Additional Comments:

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time



Chain of Custody

Work Order No: H23/251

Page 4 of 5

Project Manager:	Ethan Sessums	Bill to: (if different)	
Company Name:	NTG Environmental	Company Name:	
Address:	402 E Wood Ave	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	254-266-5456	Email:	

Work Order Comments	
Program: UST/PST	<input type="checkbox"/> RP <input type="checkbox"/> townfields <input type="checkbox"/> RC <input type="checkbox"/> s <input type="checkbox"/> erfund
State of Project:	
Reporting Level I	<input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD	<input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	Igloo 19 CTB	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code		ANALYSIS REQUEST												Preservative Codes		
Project Number:	226568	Due Date:																None: NO	DI Water: H ₂ O	
Project Location:	Lea Co. NM	TAT starts the day received by the lab, if received by 4:30pm																Cool: Cool	MeOH: Me	
Sampler's Name:	Kellan Smith																	HCL: HC	HNO ₃ : HN	
PO #:																		H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>													H ₃ PO ₄ : HP		
Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:																NaHSO ₄ : NABIS		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:																Zn Acetate+NaOH: Zn		
Total Containers:		Corrected Temperature:																NaOH+Ascorbic Acid: SAPC		
Sample Identification	Date	Time	Soil	Water	Grab/Comp	# of Cont													Sample Comments	
SW-4 (0-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-5 (0-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-6 (0-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-7 (0-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-8 (6-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-9 (6-10')	3/20/2023		X		Comp	1	X	X	X	X										
SW-10 (0-6')	3/20/2023		X		Comp	1	X	X	X	X										
SW-11 (0-6')	3/20/2023		X		Comp	1	X	X	X	X										
SW-12 (0-6')	3/20/2023		X		Comp	1	X	X	X	X										
SW-13 (0-6')	3/20/2023		X		Comp	1	X	X	X	X										

Additional Comments:

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Work Order No.:


H231251

Page 5 of 5

Work Order Comments				
Program: UST/PST	<input type="checkbox"/> RP	<input type="checkbox"/> ownfields	<input type="checkbox"/> RC	<input type="checkbox"/> s ₁ <input type="checkbox"/> erfund
State of Project:				
Reporting Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RP	<input type="checkbox"/> Level IV
Deliverables: EDD	<input type="checkbox"/>	Adapt	<input type="checkbox"/>	Other:

[illegible]

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3-20-23 1634	2		
3			4		
5			6		

Revised Date 06/17/2020 Rev. 2020

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 208507

CONDITIONS

Operator: CAZA OPERATING, LLC 200 N Loraine St Midland, TX 79701	OGRID: 249099
	Action Number: 208507
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	5/16/2023