

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

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party - Delek Logistics	OGRID
Contact Name – Cassie Whitefield	Contact Telephone – 870-310-9078
Contact email – cassie.whitefield@deleklogistics.com	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude 32.4732 Longitude -103.4672
(NAD 83 in decimal degrees to 5 decimal places)

Site Name – Outland Booster	Site Type
Date Release Discovered – 9-14-2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
C	25	22 S	34 E	Lea

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) – 20	Volume Recovered (bbls) – 5
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release – Broken site glass

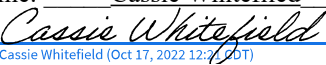
State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? Initially, it was believed to be a major release but during response activities it was determined to be a minor one.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Cassie Whitefield notified Mike Bratcher (OCD) by phone on September 14, 2022 and left a voicemail.	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <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>Cassie Whitefield</u>	Title: <u>Sr. Environmental, Health, and Safety Manager, MPH</u>
Signature: <u></u> Cassie Whitefield (Oct 17, 2022 12:27:00 PM)	Date: <u>Oct 17, 2022</u>
email: <u>cassie.whitefield@deleklogistics.com</u>	Telephone: <u>- 870-310-9078</u>
<u>OCD Only</u> Received by: _____ Date: _____	

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

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

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

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

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

State of New Mexico
Oil Conservation Division

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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: Cassie Whitefield Title: Sr. EHS Manager
Signature: *Cassie Whitefield* DocuSigned by: Cassie Whitefield Date: 2/17/2023
email: Cassie.whitefield@deleklogistics.com Telephone: 8703109078

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2228544924
District RP	
Facility ID	
Application ID	

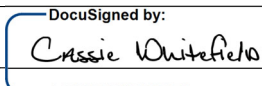
Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Cassie Whitefield Title: Sr. EHS Manager
Signature:  Date: 2/17/2023
email: Cassie.Whitefield@deleklogistics.com Telephone: 8703109078

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Jennifer Nobui Date: 02/17/2023
Printed Name: Jennifer Nobui Title: Environmental Specialist A

2135 S. Loop 250 W
Midland, Texas 79703
United States
www.GHD.com

Our Ref.: 12594900-NMOCD-1

February 17, 2023

New Mexico Oil Conservation Division
District 2
811 South First Street
Artesia, New Mexico 88210

Site Closure Report
Outland Booster Release Site
Delek Logistics Companies
Incident Identification: nAPP2228544942
C-25-22S-34E, Lea County, New Mexico

1. Introduction

GHD Services Inc. (GHD), on behalf of Delek Logistics Companies (Delek), submits this Site Closure Report to the New Mexico Oil Conservation Division (NMOCD) District 2 Office. This Report provides documentation of remedial activities conducted in the affected area at the Delek Outland Booster Site (Site). The Site is located in Unit Letter C Section 25 of Township 22 South and Range 34 East in Lea County, New Mexico. The GPS coordinates for the Site are 32.4732 N latitude and 103.4672 W longitude. The release occurred on private land owned by Hornbaker Estate. Figure 1 depicts the Site location.

2. Background Information

A C-141 Release Notification for this release was submitted to the NMOCD on October 17, 2022. The Form C-141 stated that approximately 20 barrels (bbls) of crude oil was released to the environment on September 14, 2022. Approximately 5 bbls of the released product was successfully recovered. Reportedly, the release resulted from a Site broken glass. Upon release discovery, Delek field personnel and environmental staff stopped the source of the release, secured and contained the release area, and removed and managed all free-flowing product and impacted soils through excavation. Subsequently, Delek filed a Form C-141 for this release location. The release falls under the jurisdiction of the NMOCD District 2 Office in Artesia, New Mexico. The NMOCD assigned the release with Incident Number nAPP2228544942. The Release Notification, Site Assessment/Characterization, and Closure portions of Form C-141 are attached to the front of this report.

3. Groundwater and Site Characterization

GHD characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, (Table I) from New Mexico Administrative Code (NMAC) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

According to the Site characterization evaluation and NMAC 19.15.29.12.C(4)(a)(i), the Site is located within an area of low karst potential. No groundwater data could be located within 1-half mile of the Site. No receptors

(water wells, playas, wetlands, waterways, lakebeds, or ordinance boundaries) were located within each specific boundaries or distance from the Site. Site characterization documentation is included as Attachment A. The closure criteria are listed below:

General Site Characterization and Groundwater

Site Characterization	Average Groundwater Depth (feet)
No Receptors Found	Unknown Within 1-Half Mile

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

Constituent	Limits
Chloride	600 milligrams per kilogram (mg/kg)
Total Petroleum Hydrocarbons (TPH) (Gasoline Range Organics [GRO] + Diesel Range Organics [DRO] + Motor Oil/Lube Range Organics [MRO])	100 mg/kg
TPH (GRO+DRO)	Not Applicable
Benzene	10 mg/kg
Benzene, toluene, ethylbenzene, and xylene (BTEX)	50 mg/kg

Since no groundwater data could be located within 1-half mile from the Site. GHD utilized the most stringent depth to groundwater determination of less than 50 feet below ground surface (ft bgs).

4. Initial Soil Delineation Assessment Summary and Findings

On September 20 and 23, 2022, GHD mobilized to the Site and identified an excavation approximately 1 to 4 ft deep in different areas, which demarcated the release area. Through the screening of soils collected from the bottom and sides of the excavation in various areas for volatile organic compounds (VOCs) and chlorides, thirty-eight soil samples were collected at depths ranging from 1 to 4 ft bgs. All soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by the United States Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbons (TPH) by Method 8015B Modified, and chloride by EPA Method 300 by Eurofins Analytical Laboratory (Eurofins) in Carlsbad, New Mexico.

Analytical results indicated twenty-nine of the thirty-eight soil samples collected exhibited TPH concentrations above Table I Closure Criteria for depth to groundwater less than 50 ft: BH1, BH4, BH5, BH7, BH8, BH9, BH10, BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28, BH29, BH30, BH31, BH32, BH33, SW1, and SW3.

Soil analytical results indicated benzene, BTEX, and chloride concentrations were below their Table I Closure Criteria. Sample locations are depicted on Figure 2 - Sample Location Map. A summary of the soil analytical results is provided in the Table 1.

5. Excavation, Confirmation Sampling, and Waste Management

Due to the initial soil sampling activities exhibiting TPH concentrations above NMAC 19.15.29.13 Closure Criteria, GHD and Delek's excavation contractor, Frontier Development, Inc. (Frontier), mobilized to the Site on October 18 and 21, 2022, to further excavate the affected area. On October 21, 2022, GHD collected 44 confirmation samples in areas that identified TPH exceedances and other additional suspect areas.

The areas around BH1, BH4, BH5, BH7, BH8, BH9, and BH10 were further excavated 1 foot deeper to 5 feet total depth and resampled (BH1A, BH4A, BH5A, BH7A, BH8A, BH9A, and BH10A). The areas around BH14, BH15, BH16, BH18, BH19, BH20, BH21, BH22, BH23, BH24, BH25, BH26, BH27, BH28, BH29, BH30, BH31, BH32, and BH33, were further excavated 1 foot deeper to 3 ft total depth and resampled (BH14A, BH15A, BH16A, BH18A, BH19A, BH20A, BH21A, BH22A, BH23A, BH24A, BH25A, BH26A, BH27A, BH28A, BH29A, BH30A, BH31A, BH32A, and BH33A). The sidewalls at the SW-1 and SW-3 locations were excavated further and resampled (SW-1A and SW-3A). Confirmation samples were collected from additional sidewall locations (SW-4 through SW-16).

Subsequently, on November 21, 2022, and at the request of the landowner, GHD mobilized to the Site, oversaw over excavation of an area in the vicinity of BH18 and BH19 by Frontier, and re-sampled for confirmation (OE-1). Soil analytical results for OE-1 indicated TPH, benzene, BTEX, and chloride concentrations were below their Table I Closure Criteria.

The final dimensions of the excavation measure approximately 392 ft long, ranges in width from approximately 6 to 74 ft, and ranges in depth from 3 to 5 ft. Thirty-six bottom hole (BH1 through BH36) and sixteen sidewall (SW1 through SW16) initial composite confirmation samples were collected. Composite confirmation samples represented areas no larger than 7,060 square ft. All confirmation samples were taken to Eurofins in Carlsbad, New Mexico and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300. Analytical results indicated none of the confirmation samples exhibited benzene, BTEX, or TPH concentrations above Table I Closure Criteria. Analytical results for confirmation samples are also provided in Table 1, and in the Laboratory Analytical Reports provided in Attachment B.

Waste Management activities were performed in coordination with Delek directives. Delek obtained regulatory approval via the successful processing of Form C-138 Request for Approval to Accept Solid Waste. The waste was approved for acceptance at the OCD-permitted Halfway Facility, NM1-006, 6601 Hobbs Highway/180-Mile Marker 66, Carlsbad, New Mexico, 88220. Approximately 2,167 tons of impacted soil were disposed at Halfway Facility. The waste manifests from September 15 through October 24, 2022, are available upon request and are not included in this report due to size of the file. A Daily Disposal Summary is provided as Table 2. A photographic log is included as Attachment C. Confirmation Sampling Notifications are provided at Attachment D.

6. nAPP2228544942 Closure Request

The excavation has been backfilled with non-impacted material with the seeding of the Site to occur with the further decommissioning and reclamation associated with the Site retirement activities. Site characterization, soil delineation, and remediation activities for this incident number have been performed in accordance with applicable NMOCD guidance and regulations. Based upon supporting documentation provided in this report, GHD, on behalf of Delek, respectfully requests closure and no further regulatory actions for nAPP2228544942.

If you have any questions or comments concerning this Site Characterization and Closure Report, please do not hesitate to contact our GHD - Midland office at (432) 686-0086.

Regards,

GHD



Stephen Asante-Ansong
Project Manager



J.T. Murrey
Project Director

SAA/jlf/1

Encl.: Table 1 - Summary of Soil Analytical
 Table 2 - Soil Disposal Summary
 Figure 1 - Site Location Map
 Figure 2 - Excavation and Confirmation Sampling Locations Map
 Attachment A - Site Characterization/Assessment Documentation
 Attachment B - Laboratory Analytical Reports and Chain-of-Custody Documentation
 Attachment C - Photographic Log
 Attachment D - Sampling Notifications

Copy to: Cassie Whitefield, Delek

Table 1

Summary of Soil Analytical

Chemical Name:				Benzene	Toluene	Ethylbenzene	m&p-Xylenes	o-Xylene	Xylenes (total)	Total BTEX	TPH (C6-C10) GRO	TPH (>C10-C28) DRO	TPH (>C28-C36) ORO	Total TPH	Chloride
Unit:				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMAC 19.15.29.12 Table 1 Closure Criteria (GW ≤50 feet:				10						50				100	600
Location	Sample Identification	Date	Depth												
BH1	BH1	09/20/2022	4 ft bgs	<0.0100 **1	<0.0100	<0.0100 **1	<0.0201	0.0202	0.0202	0.0202	16.5 JB	222 BF1	26.4 J	265	12.9
BH1	BH1A	10/21/2022	5 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	0.000364 J	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	35.3 *-
BH2	BH2	09/20/2022	4 ft bgs	<0.00198 F1**1	<0.00198 F1	<0.00198 F1**1	<0.00396 F1	<0.00198 F1	<0.00396 F1	<0.00396	16.9 JB	<49.9	<49.9	16.9 J	19.0
BH3	BH3	09/20/2022	4 ft bgs	<0.00996 **1	<0.00996	0.00529 J**1	0.0115 J	0.0281	0.0396	0.0449	24.6 JB	163 B	<50.0	188	22.6
BH3	BH03A	09/23/2022	5 ft bgs	<0.00202	0.00158 J	<0.00202	<0.00404	<0.00202	<0.00404	0.00158 J	21.1 J	<49.9	<49.9	16.1 J	37.2 J
BH4	BH4	09/20/2022	4 ft bgs	0.00194 J**1	<0.00998	<0.00998 **1	<0.0200	0.0227	0.0227	0.0246	<49.9	222 B	26.2 J	248	15.1
BH4	BH4A	10/21/2022	5 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	21.7 *-
BH5	BH5	09/20/2022	4 ft bgs	0.0105 **1	<0.0101	<0.0101 **1	<0.0201	<0.0101	<0.0201	0.0105 J	<50.0	155 B	20.1 J	175	27.1
BH5	BH5A	10/21/2022	5 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	16.2 J	<49.9	<49.9	16.2 J	22.4
BH6	BH6	09/20/2022	4 ft bgs	<0.00200 **1	<0.00200	<0.00200 **1	<0.00401	<0.00200	<0.00401	<0.00401	26.2 JB	20.4 JB	<50.0	46.6 J	61.1
BH7	BH7	09/20/2022	4 ft bgs	<0.00200 **1	<0.00200	<0.00200 **1	<0.00399	<0.00200	<0.00399	<0.00399	<50.0	138 B	<50.0	138	16.3
BH7	BH7A	10/21/2022	5 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	21.4
BH8	BH8	09/20/2022	4 ft bgs	<0.00996 **1	0.0203	0.130 **1	0.306	0.149	0.455	0.605	29.8 JB	199 B	15.8 J	245	11.0
BH8	BH8A	10/21/2022	5 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	16.0
BH9	BH9	09/20/2022	4 ft bgs	<0.00201 **1	<0.00201	<0.00201 **1	<0.00402	0.000811 J	<0.00402	<0.00402	20.8 JB	182 B	21.3 J	224	14.6
BH9	BH9A	10/21/2022	5 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	17.5
BH10	BH10	09/20/2022	4 ft bgs	<0.00202 **1	<0.00202	<0.00202 **1	<0.00403	0.000509 J	<0.00403	<0.00403	21.2 JB	80.8 B	<50.0	102	29.0
BH10	BH10A	10/21/2022	5 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	22.4 J	<49.9	<49.9	22.4 J	18.0
BH11	BH11	09/20/2022	4 ft bgs	<0.00200 **1	<0.00200	<0.00200 **1	<0.00399	<0.00200	<0.00399	<0.00399	<49.9	24.0 JB	<49.9	24.0 J	32.8
BH12	BH12	09/20/2022	4 ft bgs	<0.00199 **1	<0.00199	<0.00199 **1	<0.00398	<0.00199	<0.00398	<0.00398	21.2 JB	40.4 JB	27.0 J	88.6	36.1
BH13	BH13	09/20/2022	1 ft bgs	<0.00998 **1	<0.00998	<0.00998 **1	<0.0200	<0.00998	<0.0200	<0.0200	<50.0	61.6 B	<50.0	61.6	23.3
BH14	BH14	09/20/2022	1 ft bgs	0.000410 J**1	0.00304	0.000603 J**1	0.00227 J	0.00111 J	0.00338 J	0.00743	<49.9	891 B	139	1030	38.5
BH14	BH14A	10/21/2022	3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	40.4
BH15	BH15	09/20/2022	1 ft bgs	<0.00199 **1	<0.00199	<0.00199 **1	<0.00398	0.00332	0.00332 J	0.00332 J	<50.0	1060 B	158	1220	34.9
BH15	BH15A	10/21/2022	3 ft bgs	<0.00199	0.000659 J	<0.00199	<0.00398	0.000602 J	<0.00398	0.00126 J	26.0 J	<49.9	<49.9	26.0 J	40.4
BH16	BH16	09/20/2022	1 ft bgs	<0.00199 **1	0.000792 J	<0.00199 **1	<0.00398	0.000428 J	<0.00398	0.00122 J	21.3 JB	281 B	40.5 J	343	24.3
BH16	BH16A	10/21/2022	3 ft bgs	<0.00199	0.000557 J	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	16.0 J	<50.0	<50.0	16.0 J	27.6
BH17	BH17	09/20/2022	1 ft bgs	<0.00200 **1	<0.00200	<0.00200 **1	<0.00400	<0.00200	<0.00400	<0.00400	18.0 JB	<49.9	<49.9	18.0 J	22.2
BH18	BH18	09/20/2022	1 ft bgs	<0.0100 **1	<0.0100	<0.0100 **1	<0.0200	0.00206 J	<0.0200	<0.0200	<49.9	138 B	15.0 J	153	26.0
BH18	BH18A	10/21/2022	3 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	19.9
BH19	BH19	09/20/2022	1 ft bgs	<0.00201 **1	<0.00201	<0.00201 **1	<0.00402	0.00167 J	0.00167 J	0.00167 J	19.2 JB	716 B	98.3	834	47.2
BH19	BH19A	10/21/2022	3 ft bgs	<0.00200	0.000479 J	<0.00200	<0.00399	0.000605 J	<0.00399	0.00108 J	<49.9	<49.9	<49.9	<49.9	57.7
BH20	BH20	09/20/2022	1 ft bgs	<0.0399 **1	0.0141 J	0.129 **1	0.318	0.235	0.553	0.696	15.0 JB	1120 B	143	1280	48.5
BH20	BH20A	09/23/2022	3 ft bgs	0.000945 J	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	23.9 J	31.6 JB	<49.9	55.5	33.3
BH21	BH21	09/20/2022	1 ft bgs	<0.00201	<0.00201 F1	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	26.0 JB	122	26.1 J	174	33.7
BH21	BH21A	10/21/2022	3 ft bgs	<0.00199	0.000469 J	<0.00199	<0.00398	0.000481 J	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	30.6
BH22	BH22	09/20/2022	1 ft bgs	<0.0401	0.0171 J	0.0140 J	<0.0802	0.0130 J	<0.0802	0.0441 J	18.3 JB	273	40.7 J	332	26.7
BH22	BH22A	10/21/2022	3 ft bgs	<0.00200	0.000580 J	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	79.2
BH23	BH23	09/20/2022	1 ft bgs	<0.00200	0.000840 J	0.00160 J	0.00231 J	<0.00200	0.00231 J	0.00484	21.9 JB	1470	199	1690	30.9
BH23	BH23A	10/21/2022	3 ft bgs	<0.00199	0.000486 J	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	26.9 J	<49.9	<49.9	26.9 J	68.1
BH24	BH24	09/20/2022	1 ft bgs	<0.0398	<0.0398	<0.0398	<0.0707	<0.0398	<0.0707	<0.0707	26.5 JB	930	133	1100	48.2
BH24	BH24A	10/21/2022	3 ft bgs	<0.00199	0.00166 J	<0.00199	<0.00398	<0.00199	<0.00398	0.00166 J	28.9 J	<50.0	<50.0	28.9 J	24.3
BH25	BH25	09/20/2022	1 ft bgs	0.169	0.00976 J	0.0780	0.135	0.112	0.247	0.504	24.9 JB	977	139	1140	25.0
BH25	BH25A	10/21/2022	3 ft bgs	<0.00202	<0.00202	<0.00202	<0.00403	<0.00202	<0.00403	<0.00403	<49.9	19.8 J	<49.9	19.8 J	34.9
BH26	BH26	09/20/2022	1 ft bgs	0.206	0.102	<0.0398	0.0285 J	0.0295 J	0.0580 J	0.366	25.3 JB	1400	197	1620	23.4
BH26	BH26A	10/21/2022	3 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<49.8	29.2 J	<49.8	29.2 J	27.1
BH27	BH27	09/20/2022	1 ft bgs	<0.00200	0.000685 J	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	25.4 JB	210	37.7 J	281	18.4

Table 1

Summary of Soil Analytical

Chemical Name:				Benzene	Toluene	Ethylbenzene	m&p-Xylenes	o-Xylene	Xylenes (total)	Total BTEX	TPH (C6-C10) GRO	TPH (>C10-C28) DRO	TPH (>C28-C36) ORO	Total TPH	Chloride
Unit:				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NMAC 19.15.29.12 Table 1 Closure Criteria (GW ≤50 feet):				10						50				100	600
BH27	BH27A	10/21/2022	3 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<49.8	<49.8	<49.8	<49.8	227
BH28	BH28	09/20/2022	1 ft bgs	<0.00199	0.00194 J	0.00103 J	0.00197 J	0.000467 J	0.00244 J	0.00541	18.2 JB	378	61.8	458	49.4
BH28	BH28A	10/21/2022	3 ft bgs	0.00396	0.00192 J	0.000929 J	0.00761	0.00747	0.0151	0.0219	<49.9	<49.9	<49.9	<49.9	58.2
BH29	BH29	09/20/2022	1 ft bgs	0.000456 J	0.00344	0.00193 J	0.00366 J	0.000505 J	0.00417	0.00999	23.9 JB	341	55.0	420	29.0
BH29	BH29A	10/21/2022	3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	221
BH30	BH30	09/20/2022	1 ft bgs	<0.00200	0.00198 J	0.00120 J	0.00239 J	0.000522 J	0.00291 J	0.00609	25.4 JB	615	103	743	22.4
BH30	BH30A	10/21/2022	3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	119
BH31	BH31	09/20/2022	1 ft bgs	<0.00201	0.00165 J	0.00101 J	0.00225 J	0.00546	0.00771	0.0104	17.0 JB	261	42.6 J	321	23.3
BH31	BH31A	10/21/2022	3 ft bgs	<0.00198	<0.00198	<0.00198	<0.00396	<0.00198	<0.00396	<0.00396	16.1 J	<49.9	<49.9	16.1 J	101
BH32	BH32	09/20/2022	1 ft bgs	<0.00200	0.00122 J	0.000593 J	0.00123 J	<0.00200	0.00123 J	0.00304 J	20.0 JB	233	40.0 J	293	23.1
BH32	BH32A	10/21/2022	3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	25.4
BH33	BH33	09/20/2022	1 ft bgs	<0.00199	<0.00199	<0.00199	0.00158 J	0.00252	0.00410	0.00410	25.2 JB	96.6	16.4 J	138	14.3
BH33	BH33A	10/21/2022	3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	74.6
BH34	BH34	10/21/2022	3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	16.0
BH35	BH35	10/21/2022	3 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	21.0
BH36	BH36	10/21/2022	3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	<0.00401	<0.00401	<49.9	<49.9	<49.9	<49.9	18.2
SW1	SW1	09/20/2022	0-4 ft bgs	0.0186	0.00561	0.00186 J	<0.00401	0.0131	0.0131	0.0392	27.0 JB	745	107	879	17.5
SW1	SW1A	10/21/2022	0-5 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	20.8 J	<50.0	<50.0	20.8 J	28.3
SW2	SW2	09/20/2022	0-4 ft bgs	0.0155	0.00367	<0.00200	<0.00399	0.00824	0.00824	0.0274	<50.0	77.2 B	<50.0	77.2	156
SW3	SW3	09/20/2022	0-4 ft bgs	<0.0398	0.0123 J	<0.0398	<0.0795	<0.0398	<0.0795	<0.0795	<49.9	109 B	<49.9	109	25.7
SW3	SW3A	10/21/2022	0-5 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	18.5
SW4	SW4	10/21/2022	0-5 ft bgs	<0.00200	<0.00200	<0.00200	<0.00401	<0.00200	<0.00401	<0.00401	<49.9	<49.9	<49.9	<49.9	18.0
SW5	SW5	10/21/2022	0-5 ft bgs	<0.00202	<0.00202	<0.00202	<0.00404	<0.00202	<0.00404	<0.00404	<49.9	<49.9	<49.9	<49.9	43.8
SW6	SW6	10/21/2022	0-3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	27.2
SW7	SW7	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	18.5
SW8	SW8	10/21/2022	0-3 ft bgs	<0.00201	<0.00201	<0.00201	<0.00402	<0.00201	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	23.3
SW9	SW9	10/21/2022	0-3 ft bgs	<0.00198	<0.00198	<0.00198	<0.00396	<0.00198	<0.00396	<0.00396	<49.8	<49.8	<49.8	<49.8	19.9
SW10	SW10	10/21/2022	0-3 ft bgs	0.000829 J	0.000592 J	0.00190 J	<0.00400	<0.00200	<0.00400	0.00332 J	<50.0	<50.0	<50.0	<50.0	24.1
SW11	SW11	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	22.9
SW12	SW12	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	<50.0	32.2 JB*1	<50.0	32.2 J	25.0
SW13	SW13	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	19.3 J	<50.0	<50.0	19.3 J	17.3
SW14	SW14	10/21/2022	0-3 ft bgs	<0.00200	<0.00200	<0.00200	<0.00399	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	28.9
SW15	SW15	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	26.3 J	<49.9	<49.9	26.3 J	28.5
SW16	SW16	10/21/2022	0-3 ft bgs	<0.00199	<0.00199	<0.00199	<0.00398	<0.00199	<0.00398	<0.00398	23.3 JB	17.4 J	<49.9	40.7 J	21.6

Notes:
ft bgs - feet below ground surface
mg/kg - milligram per kilogram
< - indicates a result is less than the sample detection limit (SDL)
J - Estimated concentration.
B - Result detected in associated method blank.
Yellow highlight indicates that a detected result exceeded the New Mexico Association of Counties (NMAC) 19.15.29.12 Table 1 Closure Criteria for the Site.
Chlorides by the United States Environmental Protect Agency (EPA) Method 300.0.
Benzene, toluene, ethylbenzene, and xylene (BTEX) analyses by EPA Method SW 8021B.
Total petroleum hydrocarbons (TPH) analyses by EPA Method SW 8015 Method.

GRO - Gasoline Range Organics
DRO - Diesel Range Organics
ORO - Oil Range Organics

BH11

 - Sample Point Excavated

Table 2

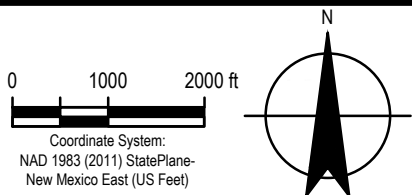
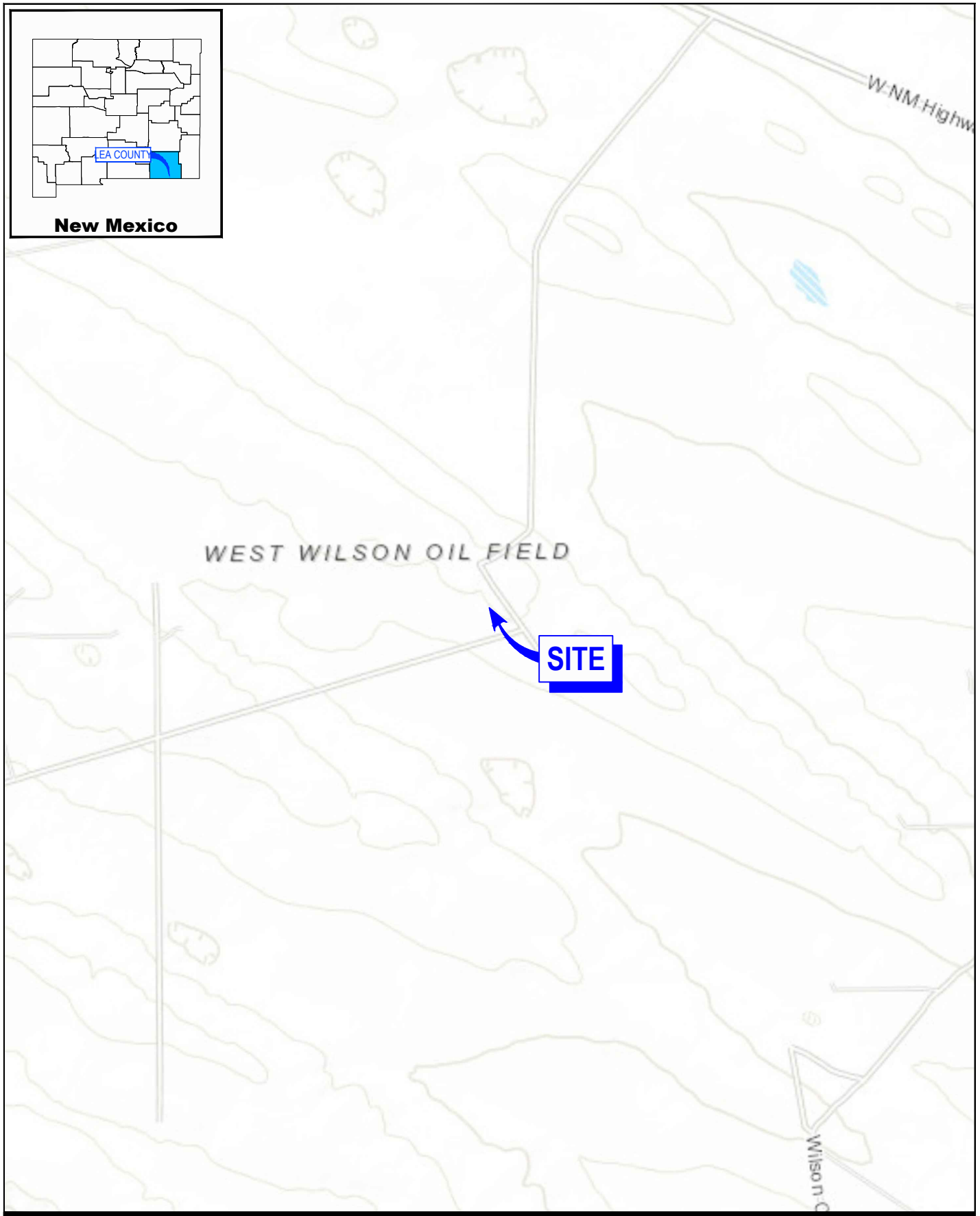
Soil Disposal Summary Delek Outland Booster Release Site Lea County, New Mexico

Date	Soil Disposed (Cubic Yards)	Soil Disposed (Tons)
10/24/2022	20	28
10/24/2022	20	28
10/24/2022	12	16.8
10/24/2022	12	16.8
10/24/2022	20	28
10/24/2022	20	28
10/24/2022	20	28
10/24/2022	12	16.8
10/24/2022	20	28
10/24/2022	12	16.8
10/24/2022	20	28
10/24/2022	Missing data	0
10/24/2022	Missing data	0
10/24/2022	Missing data	0
10/24/2022	20	28
10/24/2022	Missing data	0
10/24/2022	Missing data	0
10/19/2022	12	16.8
10/19/2022	20	28
10/19/2022	20	28
10/19/2022	20	28
10/19/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	12	16.8
10/18/2022	12	16.8
10/18/2022	20	28
10/18/2022	12	16.8
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	12	16.8
10/18/2022	12	16.8
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	12	16.8
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	12	16.8
10/18/2022	12	16.8
10/18/2022	20	28
10/18/2022	20	28
10/18/2022	20	28

Table 2

**Soil Disposal Summary
Delek Outland Booster Release Site
Lea County, New Mexico**

Date	Soil Disposed (Cubic Yards)	Soil Disposed (Tons)
9/23/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	Missing data	0
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	12	16.8
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	12	16.8
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	12	16.8
9/16/2022	Missing data	0
9/16/2022	20	28
9/16/2022	20	28
9/16/2022	20	28
9/15/2022	20	28
9/15/2022	12	16.8
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	12	16.8
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	20	28
9/15/2022	Missing data	0
9/15/2022	20	28
9/15/2022	12	16.8
Total	1548	2167.2

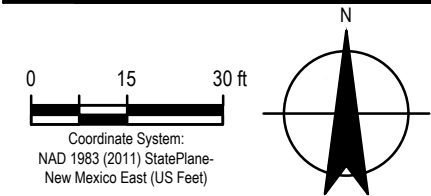
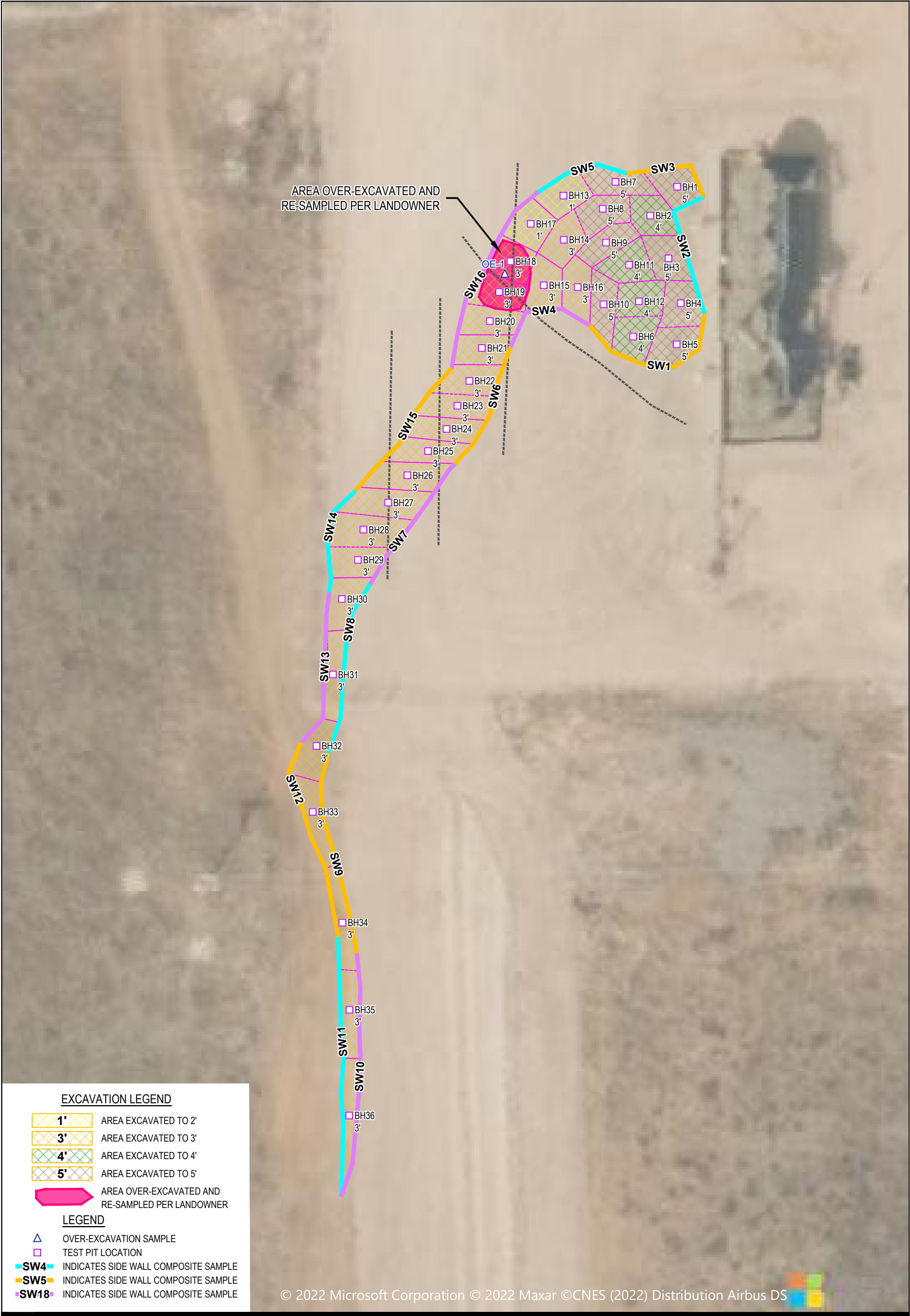


DELEK LOGISTICS PARTNERS, L.P.
LEA COUNTY, NEW MEXICO
OUTLAND BOOSTER CONDENSATE RELEASE

Project No. 12594900
Date January 2023

SITE LOCATION MAP

FIGURE 1



DELEK LOGISTICS PARTNERS, L.P.
LEA COUNTY, NEW MEXICO
OUTLAND BOOSTER CONDENSATE RELEASE

Project No. 12594900
Date January 2023

CONFIRMATION SAMPLING:
SOIL ANALYTICAL RESULTS MAP

FIGURE 2

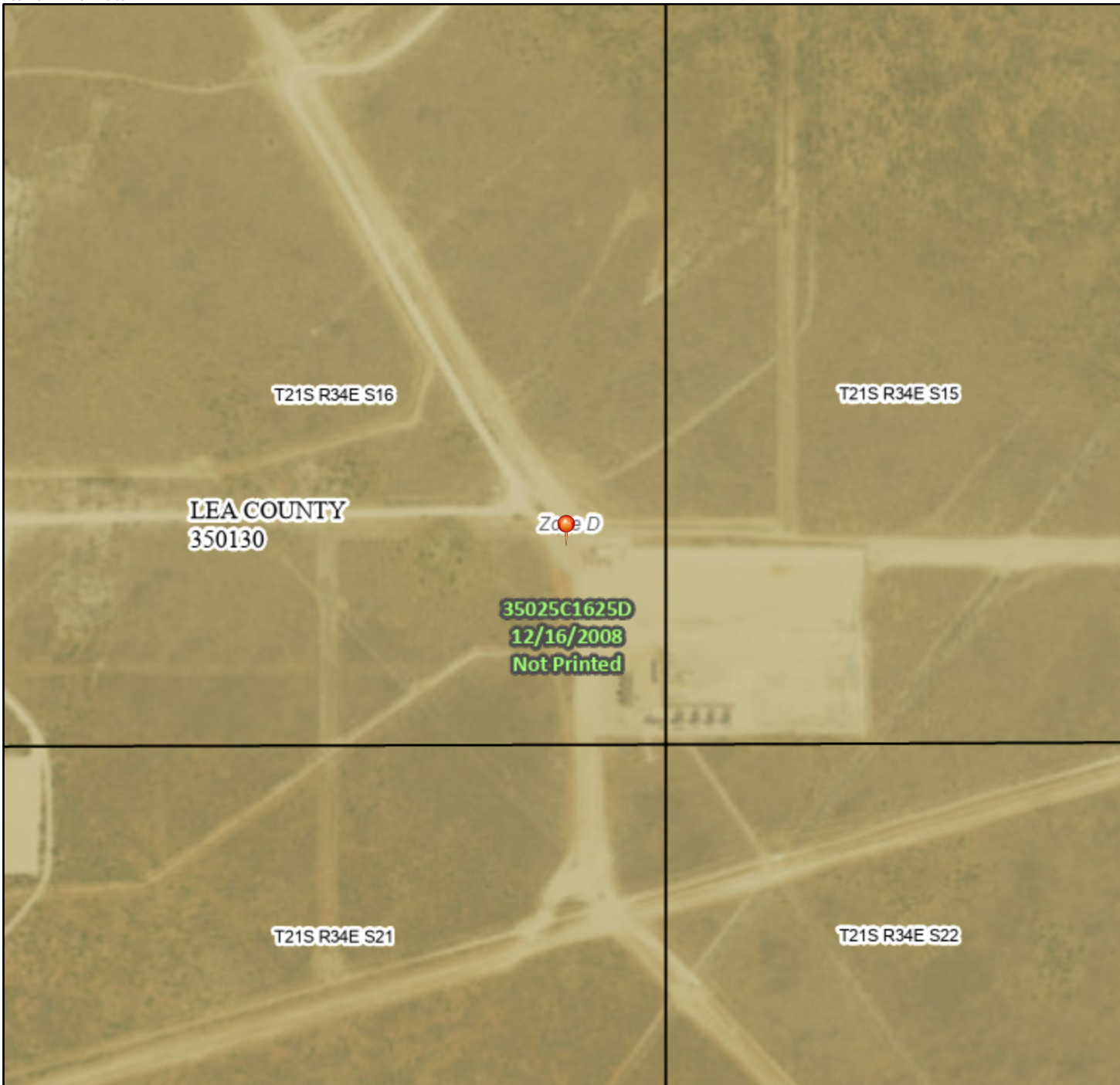
Attachment A

Site Characterization/Assessment Documentation

National Flood Hazard Layer FIRMette



103°28'21"W 32°28'39"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/23/2023 at 10:36 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Delek Outland Booster Release Site

First Potential Map

Released to Imaging: 2/17/2023 2:58:12 PM

Legend

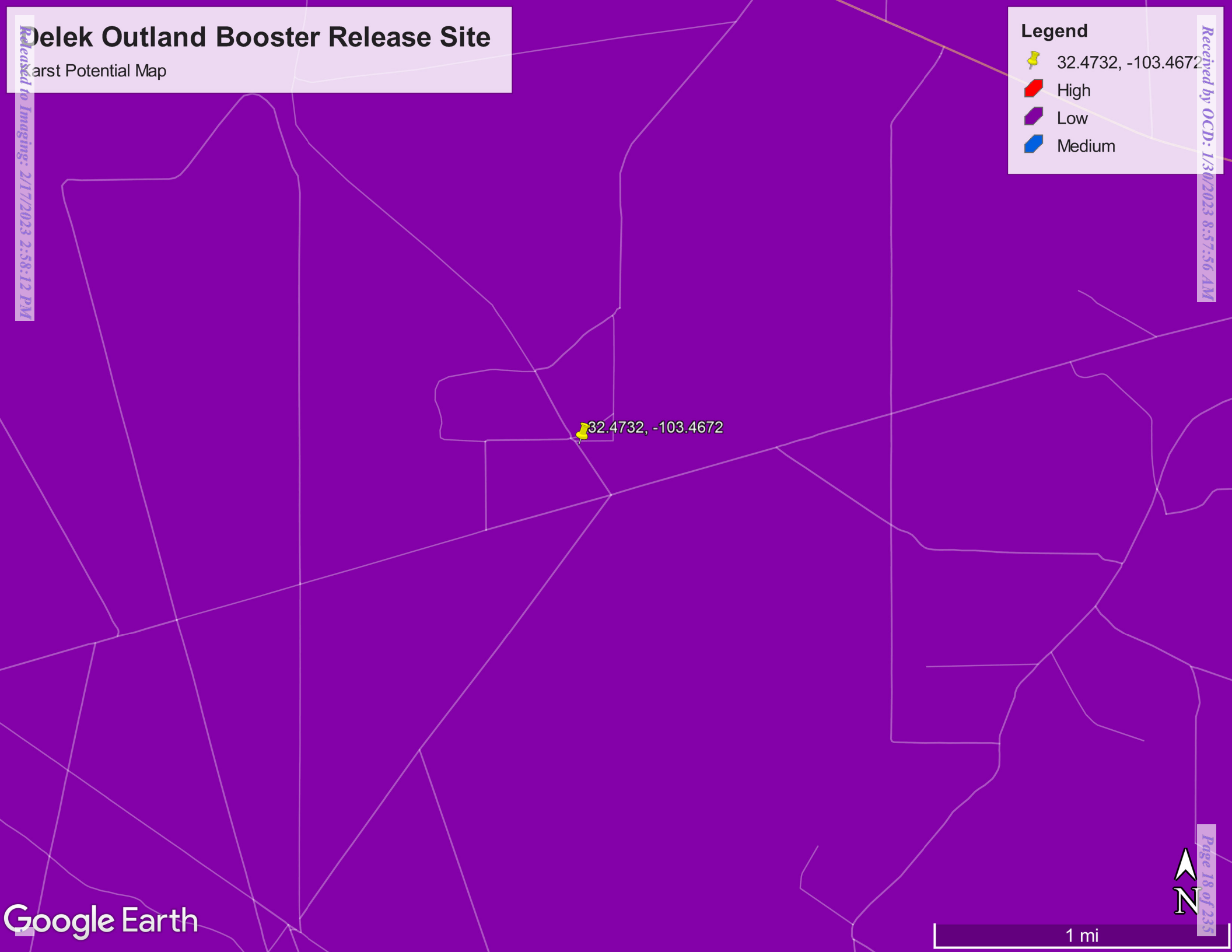
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 High

 Low

 Medium

Received by OCD: 1/30/2023 8:57:56 AM

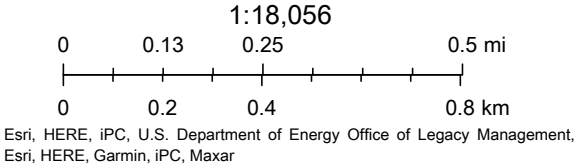


OSE POD Locations Map



1/23/2023, 10:24:26 AM

- Override 1
-
- OSE District Boundary
-
- New Mexico State Trust Lands
-
- Subsurface Estate
-
- Both Estates
-
- SiteBoundaries
-
- Active
-
- Closure Area
-
- Pending
-
- Water Right Regulations



Delek Outland Booster Release Site

Significant Watercourse Map

Legend

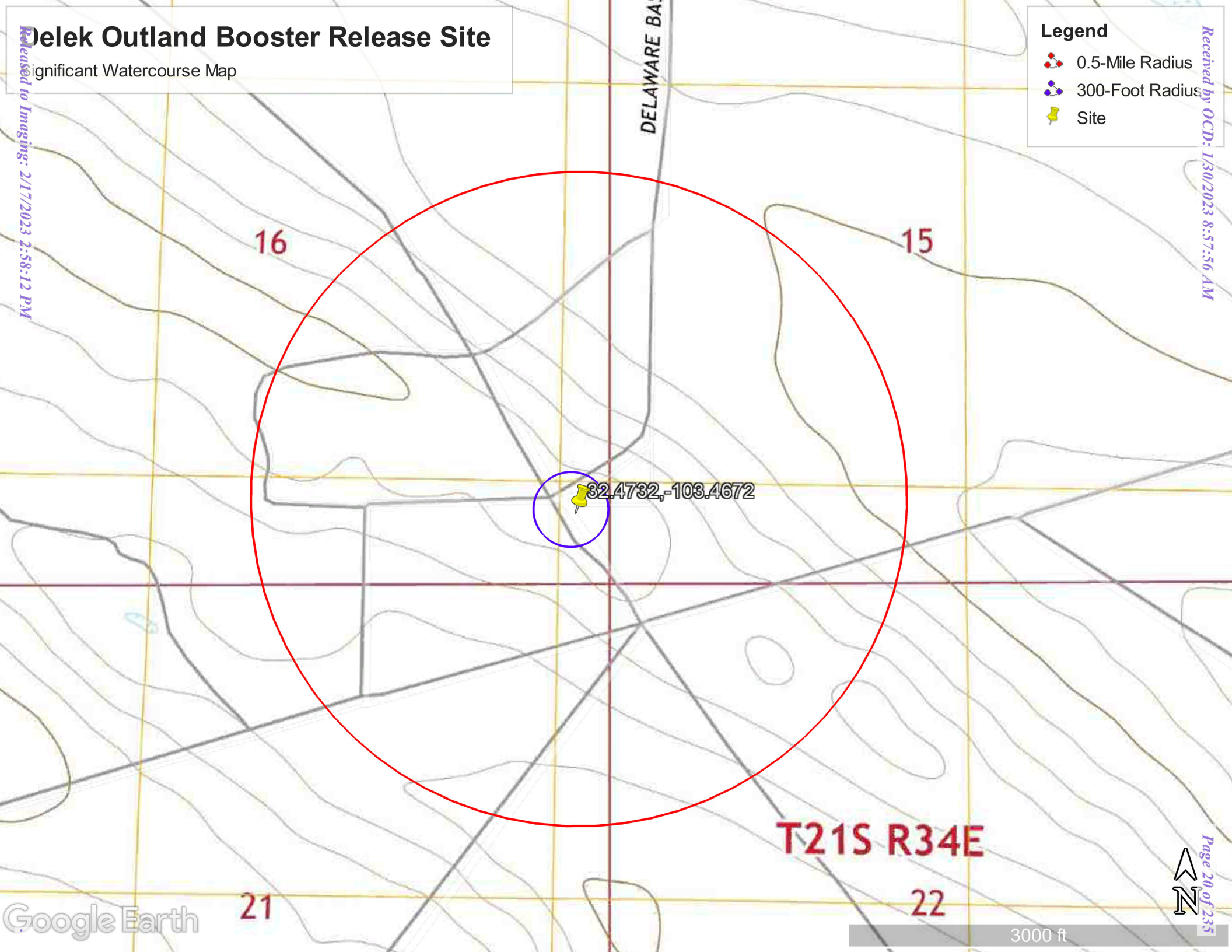
 0.5-Mile Radius

 300-Foot Radius

 Site

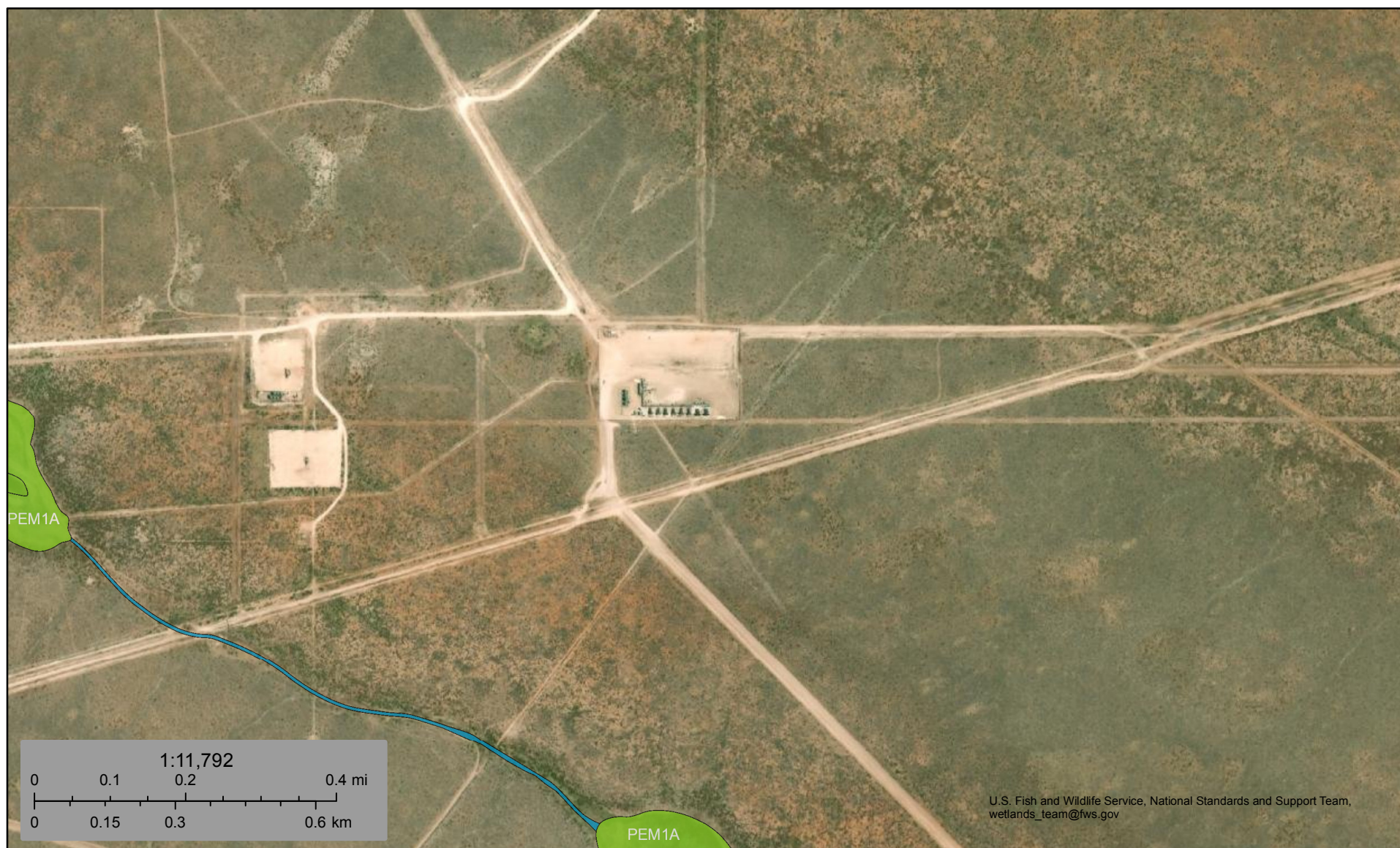
Released to Imaging: 2/17/2023 2:58:12 PM

Received by OCD: 1/30/2023 8:57:56 AM





Delek Outland Booster Release Site



January 23, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment B

Laboratory Analytical Reports and Chain-of-Custody Documentation



Environment Testing America

ANALYTICAL REPORT

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Tel: (575)988-3199

Laboratory Job ID: 890-3030-1

Laboratory Sample Delivery Group: 12594900

Client Project/Site: Delek - Outland Booster

For:

GHD Services Inc.
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Attn: Stephen Asante-Ansong

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10/5/2022 5:49:35 PM

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

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Laboratory Job ID: 890-3030-1
SDG: 12594900

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.

HPLC/IC

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

Glossary

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Job ID: 890-3030-1

Laboratory: Eurofins Carlsbad

Narrative

**Job Narrative
890-3030-1**

Receipt

The samples were received on 9/22/2022 9:34 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35686 and analytical batch 880-35919 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23 (890-3030-23), BH25 (890-3030-25), BH29 (890-3030-29), BH31 (890-3030-31), BH33 (890-3030-33), SW1 (890-3030-34), SW2 (890-3030-35) and SW3 (890-3030-36). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH1 (890-3030-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH5 (890-3030-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Benzene and Ethylbenzene biased low in LCSD. Since only an acceptable LCS is required per the method, the data has been qualified and reported.(LCSD 880-35684/2-A)

Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-35684 and analytical batch 880-35815. The associated laboratory control sample (LCS) met acceptance criteria.

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 880-35263 and analytical batch 880-35322 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-35263 and analytical batch 880-35322 contained Diesel Range Organics (Over C10-C28) 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 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-3030-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH6 (890-3030-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-35279 and analytical batch 880-35324 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-35278 and analytical batch 880-35324 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) 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.

Case Narrative

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Job ID: 890-3030-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35278 and analytical batch 880-35324 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 method blank for preparation batch 880-35279 and analytical batch 880-35324 contained Gasoline Range Organics (GRO)-C6-C10 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.

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

HPLC/IC

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH1

Lab Sample ID: 890-3030-1

Date Collected: 09/20/22 12:00

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0100	U *- *1	0.0100	0.00193	mg/Kg		09/29/22 11:26	10/03/22 16:59	5
Toluene	<0.0100	U	0.0100	0.00229	mg/Kg		09/29/22 11:26	10/03/22 16:59	5
Ethylbenzene	<0.0100	U *- *1	0.0100	0.00284	mg/Kg		09/29/22 11:26	10/03/22 16:59	5
m-Xylene & p-Xylene	<0.0201	U	0.0201	0.00507	mg/Kg		09/29/22 11:26	10/03/22 16:59	5
o-Xylene	0.0202		0.0100	0.00173	mg/Kg		09/29/22 11:26	10/03/22 16:59	5
Xylenes, Total	0.0202		0.0201	0.00507	mg/Kg		09/29/22 11:26	10/03/22 16:59	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	45	S1-	70 - 130	09/29/22 11:26	10/03/22 16:59	5
1,4-Difluorobenzene (Surr)	72		70 - 130	09/29/22 11:26	10/03/22 16:59	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0202		0.0201	0.00507	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	265		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.5	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 11:43	1
Diesel Range Organics (Over C10-C28)	222	B F1	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 11:43	1
Oil Range Organics (Over C28-C36)	26.4	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 11:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	09/23/22 13:42	09/24/22 11:43	1
o-Terphenyl	83		70 - 130	09/23/22 13:42	09/24/22 11:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9		4.98	0.855	mg/Kg			09/27/22 06:15	1

Client Sample ID: BH2

Lab Sample ID: 890-3030-2

Date Collected: 09/20/22 12:05

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F1 *- *1	0.00198	0.000381	mg/Kg		09/29/22 11:26	10/03/22 11:24	1
Toluene	<0.00198	U F1	0.00198	0.000451	mg/Kg		09/29/22 11:26	10/03/22 11:24	1
Ethylbenzene	<0.00198	U F1 *- *1	0.00198	0.000559	mg/Kg		09/29/22 11:26	10/03/22 11:24	1
m-Xylene & p-Xylene	<0.00396	U F1	0.00396	0.00100	mg/Kg		09/29/22 11:26	10/03/22 11:24	1
o-Xylene	<0.00198	U F1	0.00198	0.000341	mg/Kg		09/29/22 11:26	10/03/22 11:24	1
Xylenes, Total	<0.00396	U F1	0.00396	0.00100	mg/Kg		09/29/22 11:26	10/03/22 11:24	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH2

Lab Sample ID: 890-3030-2

Date Collected: 09/20/22 12:05

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/29/22 11:26	10/03/22 11:24	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/29/22 11:26	10/03/22 11:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg	-		10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.9	J	49.9	15.0	mg/Kg	-		09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.9	J B	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 12:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 12:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				09/23/22 13:42	09/24/22 12:48	1
o-Terphenyl	101		70 - 130				09/23/22 13:42	09/24/22 12:48	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.0		4.95	0.850	mg/Kg	-		09/27/22 06:21	1

Client Sample ID: BH3

Lab Sample ID: 890-3030-3

Date Collected: 09/20/22 12:10

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00996	U * - *1	0.00996	0.00192	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5
Toluene	<0.00996	U	0.00996	0.00227	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5
Ethylbenzene	0.00529	J * - *1	0.00996	0.00281	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5
m-Xylene & p-Xylene	0.0115	J	0.0199	0.00503	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5
o-Xylene	0.0281		0.00996	0.00171	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5
Xylenes, Total	0.0396		0.0199	0.00503	mg/Kg	-	09/29/22 11:26	10/03/22 17:19	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/29/22 11:26	10/03/22 17:19	5
1,4-Difluorobenzene (Surr)	78		70 - 130	09/29/22 11:26	10/03/22 17:19	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0449		0.0199	0.00503	mg/Kg	-		10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	188		50.0	15.0	mg/Kg	-		09/26/22 12:14	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH3

Lab Sample ID: 890-3030-3

Date Collected: 09/20/22 12:10

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.6	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:09	1
Diesel Range Organics (Over C10-C28)	163	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				09/23/22 13:42	09/24/22 13:09	1
o-Terphenyl	97		70 - 130				09/23/22 13:42	09/24/22 13:09	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.6		5.02	0.862	mg/Kg			09/27/22 06:27	1

Client Sample ID: BH4

Lab Sample ID: 890-3030-4

Date Collected: 09/20/22 12:15

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00194	J * - *1	0.00998	0.00192	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
Toluene	<0.00998	U	0.00998	0.00228	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
Ethylbenzene	<0.00998	U * - *1	0.00998	0.00282	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
m-Xylene & p-Xylene	<0.0200	U	0.0200	0.00504	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
o-Xylene	0.0227		0.00998	0.00172	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
Xylenes, Total	0.0227		0.0200	0.00504	mg/Kg		09/29/22 11:26	10/03/22 17:40	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130				09/29/22 11:26	10/03/22 17:40	5
1,4-Difluorobenzene (Surr)	99		70 - 130				09/29/22 11:26	10/03/22 17:40	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0246		0.0200	0.00504	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	248		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:31	1
Diesel Range Organics (Over C10-C28)	222	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:31	1
Oil Range Organics (Over C28-C36)	26.2	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				09/23/22 13:42	09/24/22 13:31	1
o-Terphenyl	86		70 - 130				09/23/22 13:42	09/24/22 13:31	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH4

Lab Sample ID: 890-3030-4

Date Collected: 09/20/22 12:15

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.1		4.99	0.857	mg/Kg			09/27/22 06:46	1

Client Sample ID: BH5

Lab Sample ID: 890-3030-5

Date Collected: 09/20/22 12:20

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0105	*- *1	0.0101	0.00194	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
Toluene	<0.0101	U	0.0101	0.00229	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
Ethylbenzene	<0.0101	U *- *1	0.0101	0.00284	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
m-Xylene & p-Xylene	<0.0201	U	0.0201	0.00508	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
o-Xylene	<0.0101	U	0.0101	0.00173	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
Xylenes, Total	<0.0201	U	0.0201	0.00508	mg/Kg		09/29/22 11:26	10/03/22 18:00	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	40	S1-	70 - 130				09/29/22 11:26	10/03/22 18:00	5
1,4-Difluorobenzene (Surr)	77		70 - 130				09/29/22 11:26	10/03/22 18:00	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0105	J	0.0201	0.00508	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	175		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:53	1
Diesel Range Organics (Over C10-C28)	155	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:53	1
Oil Range Organics (Over C28-C36)	20.1	J	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 13:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				09/23/22 13:42	09/24/22 13:53	1
o-Terphenyl	81		70 - 130				09/23/22 13:42	09/24/22 13:53	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.1		5.00	0.858	mg/Kg			09/27/22 06:52	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH6

Lab Sample ID: 890-3030-6

Date Collected: 09/20/22 12:25

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200	0.000386	mg/Kg		09/29/22 11:26	10/03/22 11:45	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		09/29/22 11:26	10/03/22 11:45	1
Ethylbenzene	<0.00200	U *- *1	0.00200	0.000566	mg/Kg		09/29/22 11:26	10/03/22 11:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		09/29/22 11:26	10/03/22 11:45	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		09/29/22 11:26	10/03/22 11:45	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		09/29/22 11:26	10/03/22 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	09/29/22 11:26	10/03/22 11:45	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/29/22 11:26	10/03/22 11:45	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	46.6	J	50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.2	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:15	1
Diesel Range Organics (Over C10-C28)	20.4	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	09/23/22 13:42	09/24/22 14:15	1
o-Terphenyl	133	S1+	70 - 130	09/23/22 13:42	09/24/22 14:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.1		5.00	0.858	mg/Kg			09/27/22 07:11	1

Client Sample ID: BH7

Lab Sample ID: 890-3030-7

Date Collected: 09/20/22 12:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200	0.000384	mg/Kg		09/29/22 11:26	10/03/22 12:05	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/29/22 11:26	10/03/22 12:05	1
Ethylbenzene	<0.00200	U *- *1	0.00200	0.000564	mg/Kg		09/29/22 11:26	10/03/22 12:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:26	10/03/22 12:05	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/29/22 11:26	10/03/22 12:05	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:26	10/03/22 12:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/29/22 11:26	10/03/22 12:05	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH7

Lab Sample ID: 890-3030-7

Date Collected: 09/20/22 12:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	09/29/22 11:26	10/03/22 12:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	138		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:37	1
Diesel Range Organics (Over C10-C28)	138	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				09/23/22 13:42	09/24/22 14:37	1
o-Terphenyl	120		70 - 130				09/23/22 13:42	09/24/22 14:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.3		4.98	0.855	mg/Kg			09/27/22 07:17	1

Client Sample ID: BH8

Lab Sample ID: 890-3030-8

Date Collected: 09/20/22 12:35

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00996	U *- *1	0.00996	0.00192	mg/Kg		09/29/22 11:26	10/03/22 18:21	5
Toluene	0.0203		0.00996	0.00227	mg/Kg		09/29/22 11:26	10/03/22 18:21	5
Ethylbenzene	0.130	*- *1	0.00996	0.00281	mg/Kg		09/29/22 11:26	10/03/22 18:21	5
m-Xylene & p-Xylene	0.306		0.0199	0.00503	mg/Kg		09/29/22 11:26	10/03/22 18:21	5
o-Xylene	0.149		0.00996	0.00171	mg/Kg		09/29/22 11:26	10/03/22 18:21	5
Xylenes, Total	0.455		0.0199	0.00503	mg/Kg		09/29/22 11:26	10/03/22 18:21	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/29/22 11:26	10/03/22 18:21	5
1,4-Difluorobenzene (Surr)	116		70 - 130	09/29/22 11:26	10/03/22 18:21	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.605		0.0199	0.00503	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	245		49.9	15.0	mg/Kg			09/26/22 12:14	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH8

Lab Sample ID: 890-3030-8

Date Collected: 09/20/22 12:35

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	29.8	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:59	1
Diesel Range Organics (Over C10-C28)	199	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:59	1
Oil Range Organics (Over C28-C36)	15.8	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 14:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				09/23/22 13:42	09/24/22 14:59	1
o-Terphenyl	117		70 - 130				09/23/22 13:42	09/24/22 14:59	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.0		5.02	0.862	mg/Kg			09/27/22 07:23	1

Client Sample ID: BH9

Lab Sample ID: 890-3030-9

Date Collected: 09/20/22 12:40

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201	0.000387	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
Ethylbenzene	<0.00201	U *- *1	0.00201	0.000568	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
o-Xylene	0.000811	J	0.00201	0.000346	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/29/22 11:26	10/03/22 12:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				09/29/22 11:26	10/03/22 12:25	1
1,4-Difluorobenzene (Surr)	84		70 - 130				09/29/22 11:26	10/03/22 12:25	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	224		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.8	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:21	1
Diesel Range Organics (Over C10-C28)	182	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:21	1
Oil Range Organics (Over C28-C36)	21.3	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/23/22 13:42	09/24/22 15:21	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH9

Lab Sample ID: 890-3030-9

Date Collected: 09/20/22 12:40

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	106		70 - 130	09/23/22 13:42	09/24/22 15:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.6		5.01	0.860	mg/Kg			09/27/22 07:29	1

Client Sample ID: BH10

Lab Sample ID: 890-3030-10

Date Collected: 09/20/22 12:45

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *- *1	0.00202	0.000388	mg/Kg		09/29/22 11:26	10/03/22 12:46	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		09/29/22 11:26	10/03/22 12:46	1
Ethylbenzene	<0.00202	U *- *1	0.00202	0.000570	mg/Kg		09/29/22 11:26	10/03/22 12:46	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		09/29/22 11:26	10/03/22 12:46	1
o-Xylene	0.000509	J	0.00202	0.000347	mg/Kg		09/29/22 11:26	10/03/22 12:46	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		09/29/22 11:26	10/03/22 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/29/22 11:26	10/03/22 12:46	1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/29/22 11:26	10/03/22 12:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.2	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:43	1
Diesel Range Organics (Over C10-C28)	80.8	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 15:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/23/22 13:42	09/24/22 15:43	1
o-Terphenyl	86		70 - 130	09/23/22 13:42	09/24/22 15:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.0		5.02	0.862	mg/Kg			09/27/22 07:35	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH11

Lab Sample ID: 890-3030-11

Date Collected: 09/20/22 12:50

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200	0.000384	mg/Kg		09/29/22 11:26	10/03/22 20:11	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		09/29/22 11:26	10/03/22 20:11	1
Ethylbenzene	<0.00200	U *- *1	0.00200	0.000564	mg/Kg		09/29/22 11:26	10/03/22 20:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:26	10/03/22 20:11	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/29/22 11:26	10/03/22 20:11	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:26	10/03/22 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/29/22 11:26	10/03/22 20:11	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/29/22 11:26	10/03/22 20:11	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	24.0	J	49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 16:27	1
Diesel Range Organics (Over C10-C28)	24.0	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 16:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	09/23/22 13:42	09/24/22 16:27	1
o-Terphenyl	80		70 - 130	09/23/22 13:42	09/24/22 16:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.8		5.05	0.867	mg/Kg			09/27/22 07:42	1

Client Sample ID: BH12

Lab Sample ID: 890-3030-12

Date Collected: 09/20/22 12:55

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	0.000383	mg/Kg		09/29/22 11:26	10/03/22 20:31	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		09/29/22 11:26	10/03/22 20:31	1
Ethylbenzene	<0.00199	U *- *1	0.00199	0.000563	mg/Kg		09/29/22 11:26	10/03/22 20:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/29/22 11:26	10/03/22 20:31	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		09/29/22 11:26	10/03/22 20:31	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/29/22 11:26	10/03/22 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/29/22 11:26	10/03/22 20:31	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH12

Lab Sample ID: 890-3030-12

Date Collected: 09/20/22 12:55

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	09/29/22 11:26	10/03/22 20:31	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	88.6		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.2	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:14	1
Diesel Range Organics (Over C10-C28)	40.4	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:14	1
Oil Range Organics (Over C28-C36)	27.0	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/23/22 13:42	09/25/22 11:14	1
o-Terphenyl	111		70 - 130				09/23/22 13:42	09/25/22 11:14	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36.1		5.04	0.865	mg/Kg			09/27/22 07:48	1

Client Sample ID: BH13

Lab Sample ID: 890-3030-13

Date Collected: 09/20/22 13:00

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00998	U *- *1	0.00998	0.00192	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
Toluene	<0.00998	U	0.00998	0.00228	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
Ethylbenzene	<0.00998	U *- *1	0.00998	0.00282	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
m-Xylene & p-Xylene	<0.0200	U	0.0200	0.00504	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
o-Xylene	<0.00998	U	0.00998	0.00172	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
Xylenes, Total	<0.0200	U	0.0200	0.00504	mg/Kg		09/29/22 11:26	10/03/22 22:34	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				09/29/22 11:26	10/03/22 22:34	5
1,4-Difluorobenzene (Surr)	85		70 - 130				09/29/22 11:26	10/03/22 22:34	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0200	U	0.0200	0.00504	mg/Kg			10/04/22 09:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH13

Lab Sample ID: 890-3030-13

Date Collected: 09/20/22 13:00

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	61.6		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 17:11	1
Diesel Range Organics (Over C10-C28)	61.6	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 17:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				09/23/22 13:42	09/24/22 17:11	1
o-Terphenyl	97		70 - 130				09/23/22 13:42	09/24/22 17:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		4.97	0.853	mg/Kg			09/27/22 12:01	1

Client Sample ID: BH14

Lab Sample ID: 890-3030-14

Date Collected: 09/20/22 13:05

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000410	J *- *1	0.00198	0.000382	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
Toluene	0.00304		0.00198	0.000452	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
Ethylbenzene	0.000603	J *- *1	0.00198	0.000561	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
m-Xylene & p-Xylene	0.00227	J	0.00397	0.00100	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
o-Xylene	0.00111	J	0.00198	0.000341	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
Xylenes, Total	0.00338	J	0.00397	0.00100	mg/Kg		09/29/22 11:26	10/03/22 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/29/22 11:26	10/03/22 20:51	1
1,4-Difluorobenzene (Surr)	105		70 - 130				09/29/22 11:26	10/03/22 20:51	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00743		0.00397	0.00100	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1030		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:35	1
Diesel Range Organics (Over C10-C28)	891	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:35	1
Oil Range Organics (Over C28-C36)	139		49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:35	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH14

Lab Sample ID: 890-3030-14

Date Collected: 09/20/22 13:05

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	09/23/22 13:42	09/25/22 11:35	1
o-Terphenyl	92		70 - 130	09/23/22 13:42	09/25/22 11:35	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.5		4.96	0.851	mg/Kg			09/27/22 12:16	1

Client Sample ID: BH15

Lab Sample ID: 890-3030-15

Date Collected: 09/20/22 13:10

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	0.000383	mg/Kg		09/29/22 11:26	10/03/22 21:12	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		09/29/22 11:26	10/03/22 21:12	1
Ethylbenzene	<0.00199	U *- *1	0.00199	0.000562	mg/Kg		09/29/22 11:26	10/03/22 21:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		09/29/22 11:26	10/03/22 21:12	1
o-Xylene	0.00332		0.00199	0.000342	mg/Kg		09/29/22 11:26	10/03/22 21:12	1
Xylenes, Total	0.00332	J	0.00398	0.00100	mg/Kg		09/29/22 11:26	10/03/22 21:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/29/22 11:26	10/03/22 21:12	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/29/22 11:26	10/03/22 21:12	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00332	J	0.00398	0.00100	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1220		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:57	1
Diesel Range Organics (Over C10-C28)	1060	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:57	1
Oil Range Organics (Over C28-C36)	158		50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 11:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/23/22 13:42	09/25/22 11:57	1
o-Terphenyl	107		70 - 130	09/23/22 13:42	09/25/22 11:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.9		4.98	0.855	mg/Kg			09/27/22 12:21	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH16

Lab Sample ID: 890-3030-16

Date Collected: 09/20/22 13:15

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	0.000383	mg/Kg		09/29/22 11:26	10/03/22 21:32	1
Toluene	0.000792	J	0.00199	0.000454	mg/Kg		09/29/22 11:26	10/03/22 21:32	1
Ethylbenzene	<0.00199	U *- *1	0.00199	0.000563	mg/Kg		09/29/22 11:26	10/03/22 21:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		09/29/22 11:26	10/03/22 21:32	1
o-Xylene	0.000428	J	0.00199	0.000343	mg/Kg		09/29/22 11:26	10/03/22 21:32	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		09/29/22 11:26	10/03/22 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	09/29/22 11:26	10/03/22 21:32	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/29/22 11:26	10/03/22 21:32	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00122	J	0.00398	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	343		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.3	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:18	1
Diesel Range Organics (Over C10-C28)	281	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:18	1
Oil Range Organics (Over C28-C36)	40.5	J	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	09/23/22 13:42	09/25/22 12:18	1
o-Terphenyl	93		70 - 130	09/23/22 13:42	09/25/22 12:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.3		5.01	0.860	mg/Kg			09/27/22 12:25	1

Client Sample ID: BH17

Lab Sample ID: 890-3030-17

Date Collected: 09/20/22 13:20

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200	0.000385	mg/Kg		09/29/22 11:26	10/03/22 21:53	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/29/22 11:26	10/03/22 21:53	1
Ethylbenzene	<0.00200	U *- *1	0.00200	0.000565	mg/Kg		09/29/22 11:26	10/03/22 21:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:26	10/03/22 21:53	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/29/22 11:26	10/03/22 21:53	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:26	10/03/22 21:53	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH17

Lab Sample ID: 890-3030-17

Date Collected: 09/20/22 13:20

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	09/29/22 11:26	10/03/22 21:53	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/29/22 11:26	10/03/22 21:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg	-		10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	18.0	J	49.9	15.0	mg/Kg	-		09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.0	J B	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 18:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 18:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	09/23/22 13:42	09/24/22 18:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/23/22 13:42	09/24/22 18:40	1
o-Terphenyl	110		70 - 130				09/23/22 13:42	09/24/22 18:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.2		5.03	0.863	mg/Kg	-		09/27/22 12:30	1

Client Sample ID: BH18

Lab Sample ID: 890-3030-18

Date Collected: 09/20/22 13:25

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0100	U *- *1	0.0100	0.00193	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5
Toluene	<0.0100	U	0.0100	0.00228	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5
Ethylbenzene	<0.0100	U *- *1	0.0100	0.00283	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5
m-Xylene & p-Xylene	<0.0200	U	0.0200	0.00506	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5
o-Xylene	0.00206	J	0.0100	0.00172	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5
Xylenes, Total	<0.0200	U	0.0200	0.00506	mg/Kg	-	09/29/22 11:26	10/03/22 22:54	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/29/22 11:26	10/03/22 22:54	5
1,4-Difluorobenzene (Surr)	88		70 - 130	09/29/22 11:26	10/03/22 22:54	5

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0200	U	0.0200	0.00506	mg/Kg	-		10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	153		49.9	15.0	mg/Kg	-		09/26/22 12:14	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH18

Lab Sample ID: 890-3030-18

Date Collected: 09/20/22 13:25

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 19:02	1
Diesel Range Organics (Over C10-C28)	138	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 19:02	1
Oil Range Organics (Over C28-C36)	15.0	J	49.9	15.0	mg/Kg		09/23/22 13:42	09/24/22 19:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				09/23/22 13:42	09/24/22 19:02	1
o-Terphenyl	92		70 - 130				09/23/22 13:42	09/24/22 19:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.0		5.02	0.862	mg/Kg			09/27/22 12:45	1

Client Sample ID: BH19

Lab Sample ID: 890-3030-19

Date Collected: 09/20/22 13:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201	0.000387	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
Ethylbenzene	<0.00201	U *- *1	0.00201	0.000567	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
o-Xylene	0.00167	J	0.00201	0.000345	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
Xylenes, Total	0.00167	J	0.00402	0.00101	mg/Kg		09/29/22 11:26	10/03/22 22:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				09/29/22 11:26	10/03/22 22:13	1
1,4-Difluorobenzene (Surr)	107		70 - 130				09/29/22 11:26	10/03/22 22:13	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00167	J	0.00402	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	834		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.2	J B	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:40	1
Diesel Range Organics (Over C10-C28)	716	B	50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:40	1
Oil Range Organics (Over C28-C36)	98.3		50.0	15.0	mg/Kg		09/23/22 13:42	09/25/22 12:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				09/23/22 13:42	09/25/22 12:40	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH19

Lab Sample ID: 890-3030-19

Date Collected: 09/20/22 13:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	97		70 - 130	09/23/22 13:42	09/25/22 12:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.2		5.00	0.858	mg/Kg			09/27/22 12:50	1

Client Sample ID: BH20

Lab Sample ID: 890-3030-20

Date Collected: 09/20/22 13:35

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U *- *1	0.0399	0.00768	mg/Kg		09/29/22 11:26	10/03/22 23:14	20
Toluene	0.0141	J	0.0399	0.00910	mg/Kg		09/29/22 11:26	10/03/22 23:14	20
Ethylbenzene	0.129	*- *1	0.0399	0.0113	mg/Kg		09/29/22 11:26	10/03/22 23:14	20
m-Xylene & p-Xylene	0.318		0.0798	0.0202	mg/Kg		09/29/22 11:26	10/03/22 23:14	20
o-Xylene	0.235		0.0399	0.00687	mg/Kg		09/29/22 11:26	10/03/22 23:14	20
Xylenes, Total	0.553		0.0798	0.0202	mg/Kg		09/29/22 11:26	10/03/22 23:14	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/29/22 11:26	10/03/22 23:14	20
1,4-Difluorobenzene (Surr)	85		70 - 130	09/29/22 11:26	10/03/22 23:14	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.696		0.0798	0.0202	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1280		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.0	J B	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 13:01	1
Diesel Range Organics (Over C10-C28)	1120	B	49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 13:01	1
Oil Range Organics (Over C28-C36)	143		49.9	15.0	mg/Kg		09/23/22 13:42	09/25/22 13:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	09/23/22 13:42	09/25/22 13:01	1
o-Terphenyl	82		70 - 130	09/23/22 13:42	09/25/22 13:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.5		5.00	0.858	mg/Kg			09/27/22 12:55	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH21

Lab Sample ID: 890-3030-21

Date Collected: 09/20/22 13:40

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		09/29/22 11:29	10/03/22 19:14	1
Toluene	<0.00201	U F1	0.00201	0.000459	mg/Kg		09/29/22 11:29	10/03/22 19:14	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		09/29/22 11:29	10/03/22 19:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		09/29/22 11:29	10/03/22 19:14	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		09/29/22 11:29	10/03/22 19:14	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		09/29/22 11:29	10/03/22 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	09/29/22 11:29	10/03/22 19:14	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/29/22 11:29	10/03/22 19:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	174		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.0	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 13:22	1
Diesel Range Organics (Over C10-C28)	122		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 13:22	1
Oil Range Organics (Over C28-C36)	26.1	J	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/23/22 13:45	09/25/22 13:22	1
o-Terphenyl	103		70 - 130	09/23/22 13:45	09/25/22 13:22	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.7		4.99	0.857	mg/Kg			09/27/22 13:00	1

Client Sample ID: BH22

Lab Sample ID: 890-3030-22

Date Collected: 09/20/22 13:45

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401	0.00772	mg/Kg		09/29/22 11:29	10/03/22 21:17	20
Toluene	0.0171	J	0.0401	0.00914	mg/Kg		09/29/22 11:29	10/03/22 21:17	20
Ethylbenzene	0.0140	J	0.0401	0.0113	mg/Kg		09/29/22 11:29	10/03/22 21:17	20
m-Xylene & p-Xylene	<0.0802	U	0.0802	0.0202	mg/Kg		09/29/22 11:29	10/03/22 21:17	20
o-Xylene	0.0130	J	0.0401	0.00689	mg/Kg		09/29/22 11:29	10/03/22 21:17	20
Xylenes, Total	<0.0802	U	0.0802	0.0202	mg/Kg		09/29/22 11:29	10/03/22 21:17	20

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH22

Lab Sample ID: 890-3030-22

Date Collected: 09/20/22 13:45

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	09/29/22 11:29	10/03/22 21:17	20
1,4-Difluorobenzene (Surr)	101		70 - 130	09/29/22 11:29	10/03/22 21:17	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0441	J	0.0802	0.0202	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	332		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.3	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/24/22 22:42	1
Diesel Range Organics (Over C10-C28)	273		49.9	15.0	mg/Kg		09/23/22 13:45	09/24/22 22:42	1
Oil Range Organics (Over C28-C36)	40.7	J	49.9	15.0	mg/Kg		09/23/22 13:45	09/24/22 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/23/22 13:45	09/24/22 22:42	1
o-Terphenyl	102		70 - 130	09/23/22 13:45	09/24/22 22:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.7		4.97	0.853	mg/Kg			09/27/22 13:04	1

Client Sample ID: BH23

Lab Sample ID: 890-3030-23

Date Collected: 09/20/22 13:50

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/29/22 11:29	10/03/22 19:34	1
Toluene	0.000840	J	0.00200	0.000455	mg/Kg		09/29/22 11:29	10/03/22 19:34	1
Ethylbenzene	0.00169	J	0.00200	0.000564	mg/Kg		09/29/22 11:29	10/03/22 19:34	1
m-Xylene & p-Xylene	0.00231	J	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/03/22 19:34	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/29/22 11:29	10/03/22 19:34	1
Xylenes, Total	0.00231	J	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/03/22 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130	09/29/22 11:29	10/03/22 19:34	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/29/22 11:29	10/03/22 19:34	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00484		0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH23

Lab Sample ID: 890-3030-23

Date Collected: 09/20/22 13:50

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1690		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.9	J B	50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 23:03	1
Diesel Range Organics (Over C10-C28)	1470		50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 23:03	1
Oil Range Organics (Over C28-C36)	199		50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 23:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				09/23/22 13:45	09/24/22 23:03	1
o-Terphenyl	102		70 - 130				09/23/22 13:45	09/24/22 23:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.9		4.96	0.851	mg/Kg			09/27/22 13:09	1

Client Sample ID: BH24

Lab Sample ID: 890-3030-24

Date Collected: 09/20/22 13:55

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398	0.00767	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
Toluene	<0.0398	U	0.0398	0.00908	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
Ethylbenzene	<0.0398	U	0.0398	0.0113	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
m-Xylene & p-Xylene	<0.0797	U	0.0797	0.0201	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
o-Xylene	<0.0398	U	0.0398	0.00685	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
Xylenes, Total	<0.0797	U	0.0797	0.0201	mg/Kg		09/29/22 11:29	10/03/22 21:37	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				09/29/22 11:29	10/03/22 21:37	20
1,4-Difluorobenzene (Surr)	107		70 - 130				09/29/22 11:29	10/03/22 21:37	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0797	U	0.0797	0.0201	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1100		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.5	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/24/22 23:24	1
Diesel Range Organics (Over C10-C28)	938		49.9	15.0	mg/Kg		09/23/22 13:45	09/24/22 23:24	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH24

Lab Sample ID: 890-3030-24

Date Collected: 09/20/22 13:55

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	133		49.9	15.0	mg/Kg	-	09/23/22 13:45	09/24/22 23:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/23/22 13:45	09/24/22 23:24	1
o-Terphenyl	107		70 - 130				09/23/22 13:45	09/24/22 23:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.2		5.03	0.863	mg/Kg	-		09/27/22 13:24	1

Client Sample ID: BH25

Lab Sample ID: 890-3030-25

Date Collected: 09/20/22 14:00

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.169		0.0404	0.00778	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
Toluene	0.00976	J	0.0404	0.00921	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
Ethylbenzene	0.0780		0.0404	0.0114	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
m-Xylene & p-Xylene	0.135		0.0808	0.0204	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
o-Xylene	0.112		0.0404	0.00695	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
Xylenes, Total	0.247		0.0808	0.0204	mg/Kg	-	09/29/22 11:29	10/03/22 21:58	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130				09/29/22 11:29	10/03/22 21:58	20
1,4-Difluorobenzene (Surr)	133	S1+	70 - 130				09/29/22 11:29	10/03/22 21:58	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.504		0.0808	0.0204	mg/Kg	-		10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1140		50.0	15.0	mg/Kg	-		09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.9	J B	50.0	15.0	mg/Kg	-	09/23/22 13:45	09/24/22 23:45	1
Diesel Range Organics (Over C10-C28)	977		50.0	15.0	mg/Kg	-	09/23/22 13:45	09/24/22 23:45	1
Oil Range Organics (Over C28-C36)	139		50.0	15.0	mg/Kg	-	09/23/22 13:45	09/24/22 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				09/23/22 13:45	09/24/22 23:45	1
o-Terphenyl	107		70 - 130				09/23/22 13:45	09/24/22 23:45	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH25

Lab Sample ID: 890-3030-25

Date Collected: 09/20/22 14:00

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.0		5.01	0.860	mg/Kg			09/27/22 13:29	1

Client Sample ID: BH26

Lab Sample ID: 890-3030-26

Date Collected: 09/20/22 14:05

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.206		0.0398	0.00765	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
Toluene	0.102		0.0398	0.00907	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
Ethylbenzene	<0.0398	U	0.0398	0.0112	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
m-Xylene & p-Xylene	0.0285	J	0.0795	0.0201	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
o-Xylene	0.0295	J	0.0398	0.00684	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
Xylenes, Total	0.0580	J	0.0795	0.0201	mg/Kg		09/29/22 11:29	10/03/22 22:18	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				09/29/22 11:29	10/03/22 22:18	20
1,4-Difluorobenzene (Surr)	99		70 - 130				09/29/22 11:29	10/03/22 22:18	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.366		0.0795	0.0201	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1620		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.3	J B	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:06	1
Diesel Range Organics (Over C10-C28)	1400		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:06	1
Oil Range Organics (Over C28-C36)	197		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/23/22 13:45	09/25/22 00:06	1
o-Terphenyl	103		70 - 130				09/23/22 13:45	09/25/22 00:06	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.4		5.01	0.860	mg/Kg			09/27/22 13:43	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH27

Lab Sample ID: 890-3030-27

Date Collected: 09/20/22 14:10

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
Toluene	0.000685	J	0.00200	0.000455	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/03/22 23:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				09/29/22 11:29	10/03/22 23:40	1
1,4-Difluorobenzene (Surr)	86		70 - 130				09/29/22 11:29	10/03/22 23:40	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	281		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.4	J B	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:27	1
Diesel Range Organics (Over C10-C28)	218		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:27	1
Oil Range Organics (Over C28-C36)	37.7	J	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				09/23/22 13:45	09/25/22 00:27	1
o-Terphenyl	122		70 - 130				09/23/22 13:45	09/25/22 00:27	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		4.98	0.855	mg/Kg			09/27/22 13:48	1

Client Sample ID: BH28

Lab Sample ID: 890-3030-28

Date Collected: 09/20/22 14:15

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/29/22 11:29	10/04/22 00:01	1
Toluene	0.00194	J	0.00199	0.000454	mg/Kg		09/29/22 11:29	10/04/22 00:01	1
Ethylbenzene	0.00103	J	0.00199	0.000563	mg/Kg		09/29/22 11:29	10/04/22 00:01	1
m-Xylene & p-Xylene	0.00197	J	0.00398	0.00101	mg/Kg		09/29/22 11:29	10/04/22 00:01	1
o-Xylene	0.000467	J	0.00199	0.000343	mg/Kg		09/29/22 11:29	10/04/22 00:01	1
Xylenes, Total	0.00244	J	0.00398	0.00101	mg/Kg		09/29/22 11:29	10/04/22 00:01	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH28

Lab Sample ID: 890-3030-28

Date Collected: 09/20/22 14:15

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	09/29/22 11:29	10/04/22 00:01	1
1,4-Difluorobenzene (Surr)	80		70 - 130	09/29/22 11:29	10/04/22 00:01	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00541		0.00398	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	458		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.2	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:49	1
Diesel Range Organics (Over C10-C28)	378		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:49	1
Oil Range Organics (Over C28-C36)	61.8		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/23/22 13:45	09/25/22 00:49	1
o-Terphenyl	117		70 - 130	09/23/22 13:45	09/25/22 00:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.4		5.02	0.862	mg/Kg			09/27/22 13:53	1

Client Sample ID: BH29

Lab Sample ID: 890-3030-29

Date Collected: 09/20/22 14:20

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000456	J	0.00201	0.000387	mg/Kg		09/29/22 11:29	10/04/22 00:21	1
Toluene	0.00344		0.00201	0.000459	mg/Kg		09/29/22 11:29	10/04/22 00:21	1
Ethylbenzene	0.00193	J	0.00201	0.000568	mg/Kg		09/29/22 11:29	10/04/22 00:21	1
m-Xylene & p-Xylene	0.00366	J	0.00402	0.00102	mg/Kg		09/29/22 11:29	10/04/22 00:21	1
o-Xylene	0.000505	J	0.00201	0.000346	mg/Kg		09/29/22 11:29	10/04/22 00:21	1
Xylenes, Total	0.00417		0.00402	0.00102	mg/Kg		09/29/22 11:29	10/04/22 00:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	09/29/22 11:29	10/04/22 00:21	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/29/22 11:29	10/04/22 00:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00999		0.00402	0.00102	mg/Kg			10/04/22 09:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH29

Lab Sample ID: 890-3030-29

Date Collected: 09/20/22 14:20

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	420		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.9	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:10	1
Diesel Range Organics (Over C10-C28)	341		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:10	1
Oil Range Organics (Over C28-C36)	55.0		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/23/22 13:45	09/25/22 01:10	1
o-Terphenyl	99		70 - 130				09/23/22 13:45	09/25/22 01:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.0		5.04	0.865	mg/Kg			09/27/22 13:58	1

Client Sample ID: BH30

Lab Sample ID: 890-3030-30

Date Collected: 09/20/22 14:25

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
Toluene	0.00198	J	0.00200	0.000456	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
Ethylbenzene	0.00120	J	0.00200	0.000565	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
m-Xylene & p-Xylene	0.00239	J	0.00400	0.00101	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
o-Xylene	0.000522	J	0.00200	0.000344	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
Xylenes, Total	0.00291	J	0.00400	0.00101	mg/Kg		09/29/22 11:29	10/04/22 00:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				09/29/22 11:29	10/04/22 00:42	1
1,4-Difluorobenzene (Surr)	86		70 - 130				09/29/22 11:29	10/04/22 00:42	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00609		0.00400	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	743		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.4	J B	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:31	1
Diesel Range Organics (Over C10-C28)	615		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:31	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH30

Lab Sample ID: 890-3030-30

Date Collected: 09/20/22 14:25

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	103		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 01:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				09/23/22 13:45	09/25/22 01:31	1
o-Terphenyl	128		70 - 130				09/23/22 13:45	09/25/22 01:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		4.96	0.851	mg/Kg			09/27/22 14:03	1

Client Sample ID: BH31

Lab Sample ID: 890-3030-31

Date Collected: 09/20/22 14:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
Toluene	0.00165	J	0.00201	0.000459	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
Ethylbenzene	0.00101	J	0.00201	0.000568	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
m-Xylene & p-Xylene	0.00225	J	0.00402	0.00102	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
o-Xylene	0.00546		0.00201	0.000346	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
Xylenes, Total	0.00771		0.00402	0.00102	mg/Kg		09/29/22 11:29	10/04/22 01:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130				09/29/22 11:29	10/04/22 01:02	1
1,4-Difluorobenzene (Surr)	83		70 - 130				09/29/22 11:29	10/04/22 01:02	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0104		0.00402	0.00102	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	321		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.0	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:13	1
Diesel Range Organics (Over C10-C28)	261		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:13	1
Oil Range Organics (Over C28-C36)	42.6	J	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				09/23/22 13:45	09/25/22 02:13	1
o-Terphenyl	118		70 - 130				09/23/22 13:45	09/25/22 02:13	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH31

Lab Sample ID: 890-3030-31

Date Collected: 09/20/22 14:30

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		5.05	0.867	mg/Kg			09/27/22 14:07	1

Client Sample ID: BH32

Lab Sample ID: 890-3030-32

Date Collected: 09/20/22 14:35

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
Toluene	0.00122	J	0.00200	0.000455	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
Ethylbenzene	0.000593	J	0.00200	0.000564	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
m-Xylene & p-Xylene	0.00123	J	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
Xylenes, Total	0.00123	J	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/04/22 01:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130				09/29/22 11:29	10/04/22 01:23	1
1,4-Difluorobenzene (Surr)	86		70 - 130				09/29/22 11:29	10/04/22 01:23	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00304	J	0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	293		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.0	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:34	1
Diesel Range Organics (Over C10-C28)	233		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:34	1
Oil Range Organics (Over C28-C36)	40.0	J	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/23/22 13:45	09/25/22 02:34	1
o-Terphenyl	116		70 - 130				09/23/22 13:45	09/25/22 02:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.1		4.97	0.853	mg/Kg			09/27/22 14:12	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH33

Lab Sample ID: 890-3030-33

Date Collected: 09/20/22 14:40

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/29/22 11:29	10/04/22 01:43	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		09/29/22 11:29	10/04/22 01:43	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		09/29/22 11:29	10/04/22 01:43	1
m-Xylene & p-Xylene	0.00158	J	0.00398	0.00101	mg/Kg		09/29/22 11:29	10/04/22 01:43	1
o-Xylene	0.00252		0.00199	0.000343	mg/Kg		09/29/22 11:29	10/04/22 01:43	1
Xylenes, Total	0.00410		0.00398	0.00101	mg/Kg		09/29/22 11:29	10/04/22 01:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	09/29/22 11:29	10/04/22 01:43	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/29/22 11:29	10/04/22 01:43	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00410		0.00398	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	138		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	25.2	J B	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:55	1
Diesel Range Organics (Over C10-C28)	96.6		50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:55	1
Oil Range Organics (Over C28-C36)	16.4	J	50.0	15.0	mg/Kg		09/23/22 13:45	09/25/22 02:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/23/22 13:45	09/25/22 02:55	1
o-Terphenyl	103		70 - 130	09/23/22 13:45	09/25/22 02:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.3		5.03	0.863	mg/Kg			09/23/22 16:14	1

Client Sample ID: SW1

Lab Sample ID: 890-3030-34

Date Collected: 09/20/22 14:45

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0186		0.00200	0.000386	mg/Kg		09/29/22 11:29	10/04/22 02:03	1
Toluene	0.00561		0.00200	0.000457	mg/Kg		09/29/22 11:29	10/04/22 02:03	1
Ethylbenzene	0.00186	J	0.00200	0.000566	mg/Kg		09/29/22 11:29	10/04/22 02:03	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		09/29/22 11:29	10/04/22 02:03	1
o-Xylene	0.0131		0.00200	0.000345	mg/Kg		09/29/22 11:29	10/04/22 02:03	1
Xylenes, Total	0.0131		0.00401	0.00101	mg/Kg		09/29/22 11:29	10/04/22 02:03	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: SW1

Lab Sample ID: 890-3030-34

Date Collected: 09/20/22 14:45

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 0 - 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	292	S1+	70 - 130	09/29/22 11:29	10/04/22 02:03	1
1,4-Difluorobenzene (Surr)	15	S1-	70 - 130	09/29/22 11:29	10/04/22 02:03	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0392		0.00401	0.00101	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	879		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	27.0	J B	49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 03:17	1
Diesel Range Organics (Over C10-C28)	745		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 03:17	1
Oil Range Organics (Over C28-C36)	107		49.9	15.0	mg/Kg		09/23/22 13:45	09/25/22 03:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/23/22 13:45	09/25/22 03:17	1
o-Terphenyl	112		70 - 130				09/23/22 13:45	09/25/22 03:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.5		5.02	0.862	mg/Kg			09/23/22 16:18	1

Client Sample ID: SW2

Lab Sample ID: 890-3030-35

Date Collected: 09/20/22 14:50

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0155		0.00200	0.000384	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
Toluene	0.00367		0.00200	0.000455	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
o-Xylene	0.00824		0.00200	0.000343	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
Xylenes, Total	0.00824		0.00399	0.00101	mg/Kg		09/29/22 11:29	10/04/22 02:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				09/29/22 11:29	10/04/22 02:24	1
1,4-Difluorobenzene (Surr)	2	S1-	70 - 130				09/29/22 11:29	10/04/22 02:24	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0274		0.00399	0.00101	mg/Kg			10/04/22 09:09	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: SW2

Lab Sample ID: 890-3030-35

Date Collected: 09/20/22 14:50

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	77.2		50.0	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:03	1
Diesel Range Organics (Over C10-C28)	77.2	B	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				09/23/22 11:06	09/25/22 05:03	1
o-Terphenyl	105		70 - 130				09/23/22 11:06	09/25/22 05:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156		4.98	0.855	mg/Kg			09/23/22 16:23	1

Client Sample ID: SW3

Lab Sample ID: 890-3030-36

Date Collected: 09/20/22 14:55

Matrix: Solid

Date Received: 09/22/22 09:34

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398	0.00765	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
Toluene	0.0123	J	0.0398	0.00907	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
Ethylbenzene	<0.0398	U	0.0398	0.0112	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
m-Xylene & p-Xylene	<0.0795	U	0.0795	0.0201	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
o-Xylene	<0.0398	U	0.0398	0.00684	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
Xylenes, Total	<0.0795	U	0.0795	0.0201	mg/Kg		09/29/22 11:29	10/04/22 02:44	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	270	S1+	70 - 130				09/29/22 11:29	10/04/22 02:44	20
1,4-Difluorobenzene (Surr)	3	S1-	70 - 130				09/29/22 11:29	10/04/22 02:44	20

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795	0.0201	mg/Kg			10/04/22 09:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	109		49.9	15.0	mg/Kg			09/26/22 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:24	1
Diesel Range Organics (Over C10-C28)	109	B	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 05:24	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: SW3
Date Collected: 09/20/22 14:55
Date Received: 09/22/22 09:34
Sample Depth: 0 - 4

Lab Sample ID: 890-3030-36
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/23/22 11:06	09/25/22 05:24	1
o-Terphenyl	103		70 - 130	09/23/22 11:06	09/25/22 05:24	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.7		4.97	0.853	mg/Kg			09/23/22 16:28	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-3030-1	BH1	45 S1-	72
890-3030-2	BH2	111	101
890-3030-2 MS	BH2	99	111
890-3030-2 MSD	BH2	103	115
890-3030-3	BH3	73	78
890-3030-4	BH4	70	99
890-3030-5	BH5	40 S1-	77
890-3030-6	BH6	123	100
890-3030-7	BH7	110	105
890-3030-8	BH8	94	116
890-3030-9	BH9	107	84
890-3030-10	BH10	101	85
890-3030-11	BH11	106	106
890-3030-12	BH12	112	105
890-3030-13	BH13	111	85
890-3030-14	BH14	110	105
890-3030-15	BH15	113	103
890-3030-16	BH16	120	105
890-3030-17	BH17	117	103
890-3030-18	BH18	114	88
890-3030-19	BH19	118	107
890-3030-20	BH20	112	85
890-3030-21	BH21	126	92
890-3030-21 MS	BH21	145 S1+	103
890-3030-21 MSD	BH21	126	107
890-3030-22	BH22	78	101
890-3030-23	BH23	142 S1+	103
890-3030-24	BH24	96	107
890-3030-25	BH25	155 S1+	133 S1+
890-3030-26	BH26	85	99
890-3030-27	BH27	125	86
890-3030-28	BH28	122	80
890-3030-29	BH29	131 S1+	89
890-3030-30	BH30	124	86
890-3030-31	BH31	131 S1+	83
890-3030-32	BH32	129	86
890-3030-33	BH33	140 S1+	98
890-3030-34	SW1	292 S1+	15 S1-
890-3030-35	SW2	142 S1+	2 S1-
890-3030-36	SW3	270 S1+	3 S1-
LCS 880-35684/1-A	Lab Control Sample	110	105
LCS 880-35686/1-A	Lab Control Sample	63 S1-	99
LCSD 880-35684/2-A	Lab Control Sample Dup	113	107
LCSD 880-35686/2-A	Lab Control Sample Dup	130	105
MB 880-35684/5-A	Method Blank	106	101
MB 880-35686/5-A	Method Blank	113	88
MB 880-35691/5-A	Method Blank	102	110

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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Surrogate Summary

Client: GHD Services Inc.
 Project/Site: Delek - Outland Booster
 DFBZ = 1,4-Difluorobenzene (Surr)

Job ID: 890-3030-1
 SDG: 12594900

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-3030-1	BH1	78	83
890-3030-1 MS	BH1	82	79
890-3030-1 MSD	BH1	70	68 S1-
890-3030-2	BH2	95	101
890-3030-3	BH3	90	97
890-3030-4	BH4	81	86
890-3030-5	BH5	79	81
890-3030-6	BH6	125	133 S1+
890-3030-7	BH7	114	120
890-3030-8	BH8	112	117
890-3030-9	BH9	99	106
890-3030-10	BH10	87	86
890-3030-11	BH11	77	80
890-3030-12	BH12	104	111
890-3030-13	BH13	92	97
890-3030-14	BH14	88	92
890-3030-15	BH15	104	107
890-3030-16	BH16	92	93
890-3030-17	BH17	99	110
890-3030-18	BH18	86	92
890-3030-19	BH19	97	97
890-3030-20	BH20	81	82
890-3030-21	BH21	103	103
890-3030-21 MS	BH21	96	91
890-3030-21 MSD	BH21	97	91
890-3030-22	BH22	98	102
890-3030-23	BH23	97	102
890-3030-24	BH24	104	107
890-3030-25	BH25	107	107
890-3030-26	BH26	103	103
890-3030-27	BH27	117	122
890-3030-28	BH28	115	117
890-3030-29	BH29	96	99
890-3030-30	BH30	124	128
890-3030-31	BH31	114	118
890-3030-32	BH32	110	116
890-3030-33	BH33	101	103
890-3030-34	SW1	106	112
890-3030-35	SW2	111	105
890-3030-36	SW3	110	103
LCS 880-35263/2-A	Lab Control Sample	117	104
LCS 880-35278/2-A	Lab Control Sample	102	102
LCS 880-35279/2-A	Lab Control Sample	94	92
LCSD 880-35263/3-A	Lab Control Sample Dup	110	103
LCSD 880-35278/3-A	Lab Control Sample Dup	122	124
LCSD 880-35279/3-A	Lab Control Sample Dup	95	98
MB 880-35263/1-A	Method Blank	156 S1+	147 S1+
MB 880-35278/1-A	Method Blank	114	124

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
MB 880-35279/1-A	Method Blank	127	138 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35684/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/29/22 11:26	10/03/22 11:04	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/29/22 11:26	10/03/22 11:04	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/29/22 11:26	10/03/22 11:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:26	10/03/22 11:04	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/29/22 11:26	10/03/22 11:04	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:26	10/03/22 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/29/22 11:26	10/03/22 11:04	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/29/22 11:26	10/03/22 11:04	1

Lab Sample ID: LCS 880-35684/1-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1112		mg/Kg		111	70 - 130
Toluene	0.100	0.1122		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1090		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2231		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1108		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-35684/2-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35684

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.05830	*- *1	mg/Kg		58	70 - 130	62	35
Toluene	0.100	0.08593		mg/Kg		86	70 - 130	27	35
Ethylbenzene	0.100	0.06064	*- *1	mg/Kg		61	70 - 130	57	35
m-Xylene & p-Xylene	0.200	0.1627		mg/Kg		81	70 - 130	31	35
o-Xylene	0.100	0.08723		mg/Kg		87	70 - 130	24	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-3030-2 MS

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: BH2

Prep Type: Total/NA

Prep Batch: 35684

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1 *- *1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130
Toluene	<0.00198	U F1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: 890-3030-2 MS

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: BH2

Prep Type: Total/NA

Prep Batch: 35684

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U F1 *- *1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.200	<0.00399	U F1	mg/Kg		0	70 - 130
o-Xylene	<0.00198	U F1	0.0998	<0.00200	U F1	mg/Kg		0	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 890-3030-2 MSD

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: BH2

Prep Type: Total/NA

Prep Batch: 35684

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00198	U F1 *- *1	0.100	<0.00201	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00198	U F1	0.100	<0.00201	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00198	U F1 *- *1	0.100	<0.00201	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00396	U F1	0.201	<0.00402	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00198	U F1	0.100	<0.00201	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: MB 880-35686/5-A

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35686

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/29/22 11:29	10/03/22 18:52	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/29/22 11:29	10/03/22 18:52	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/29/22 11:29	10/03/22 18:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:29	10/03/22 18:52	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/29/22 11:29	10/03/22 18:52	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:29	10/03/22 18:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/29/22 11:29	10/03/22 18:52	1
1,4-Difluorobenzene (Surr)	88		70 - 130	09/29/22 11:29	10/03/22 18:52	1

Lab Sample ID: LCS 880-35686/1-A

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08510		mg/Kg		85	70 - 130
Toluene	0.100	0.08461		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09682		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: LCS 880-35686/1-A

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35686

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1159		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	63	S1-	70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-35686/2-A

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35686

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08484		mg/Kg		85	70 - 130	0	35
Toluene	0.100	0.07882		mg/Kg		79	70 - 130	7	35
Ethylbenzene	0.100	0.08714		mg/Kg		87	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1805		mg/Kg		90	70 - 130	10	35
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	130		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-3030-21 MS

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35686

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.07390		mg/Kg		74	70 - 130
Toluene	<0.00201	U F1	0.100	0.06933	F1	mg/Kg		69	70 - 130
Ethylbenzene	<0.00201	U	0.100	0.07544		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1544		mg/Kg		77	70 - 130
o-Xylene	<0.00201	U	0.100	0.09053		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-3030-21 MSD

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35686

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.1003		mg/Kg		101	70 - 130	30	35
Toluene	<0.00201	U F1	0.0998	0.08664		mg/Kg		87	70 - 130	22	35
Ethylbenzene	<0.00201	U	0.0998	0.08358		mg/Kg		84	70 - 130	10	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1704		mg/Kg		85	70 - 130	10	35
o-Xylene	<0.00201	U	0.0998	0.09863		mg/Kg		99	70 - 130	9	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: 890-3030-21 MSD

Matrix: Solid

Analysis Batch: 35919

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35686

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: MB 880-35691/5-A

Matrix: Solid

Analysis Batch: 35815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35691

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 11:39	10/02/22 07:34	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		70 - 130				09/29/22 11:39	10/02/22 07:34	1	
1,4-Difluorobenzene (Surr)	110		70 - 130				09/29/22 11:39	10/02/22 07:34	1	

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

Lab Sample ID: MB 880-35263/1-A

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35263

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/24/22 20:31	1	
Diesel Range Organics (Over C10-C28)	18.72	J	50.0	15.0	mg/Kg		09/23/22 11:06	09/24/22 20:31	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/24/22 20:31	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	156	S1+	70 - 130				09/23/22 11:06	09/24/22 20:31	1	
o-Terphenyl	147	S1+	70 - 130				09/23/22 11:06	09/24/22 20:31	1	

Lab Sample ID: LCS 880-35263/2-A

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35263

		Spike	LCS	LCS				%Rec		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10		1000	1065		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)		1000	1082		mg/Kg		108	70 - 130		
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	117		70 - 130							
o-Terphenyl	104		70 - 130							

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-35263/3-A

Matrix: Solid

Analysis Batch: 35322

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35263

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1152		mg/Kg		115	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1068		mg/Kg		107	70 - 130	1	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	103		70 - 130						

Lab Sample ID: MB 880-35278/1-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35278

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.54	J	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 10:38	1
Diesel Range Organics (Over C10-C28)	23.13	J	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 10:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:42	09/24/22 10:38	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				09/23/22 13:42	09/24/22 10:38	1
o-Terphenyl	124		70 - 130				09/23/22 13:42	09/24/22 10:38	1

Lab Sample ID: LCS 880-35278/2-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	979.3		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	892.9		mg/Kg		89	70 - 130		
Surrogate	%Recovery	LCS Qualifier	Limits						
1-Chlorooctane	102		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: LCSD 880-35278/3-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35278

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1186		mg/Kg		119	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	1091		mg/Kg		109	70 - 130	20	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-35278/3-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35278

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: 890-3030-1 MS

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: BH1

Prep Type: Total/NA

Prep Batch: 35278

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	16.5	J B	996	1082		mg/Kg		107	70 - 130	
Diesel Range Organics (Over C10-C28)	222	B F1	996	889.3	F1	mg/Kg		67	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	79		70 - 130							

Lab Sample ID: 890-3030-1 MSD

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: BH1

Prep Type: Total/NA

Prep Batch: 35278

	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	16.5	J B	999	916.9		mg/Kg		90	70 - 130	16	20	
Diesel Range Organics (Over C10-C28)	222	B F1	999	773.5	F1	mg/Kg		55	70 - 130	14	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	70		70 - 130									
o-Terphenyl	68	S1-	70 - 130									

Lab Sample ID: MB 880-35279/1-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35279

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	19.61	J	50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 20:31	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 20:31	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 13:45	09/24/22 20:31	1		
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac		
1-Chlorooctane	127		70 - 130				09/23/22 13:45	09/24/22 20:31	1		
o-Terphenyl	138	S1+	70 - 130				09/23/22 13:45	09/24/22 20:31	1		

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: LCS 880-35279/2-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35279

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits	Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	926.4		mg/Kg		93		70 - 130	
Diesel Range Organics (Over C10-C28)			1000	811.7		mg/Kg		81		70 - 130	

Lab Sample ID: LCSD 880-35279/3-A

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35279

Top Bottom Section											
Analyte				Spike	LCSD	LCSD				%Rec	RPD
				Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
Gasoline Range Organics (GRO)-C6-C10				1000	901.9		mg/Kg		90	70 - 130	3
Diesel Range Organics (Over C10-C28)				1000	858.5		mg/Kg		86	70 - 130	6
Bottom Section											
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	95		70 - 130								
o-Terphenyl	98		70 - 130								

Lab Sample ID: 890-3030-21 MS

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35279

	Sample	Sample	Spike	MS	MS			%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	26.0	J B	996	1079		mg/Kg		106	70 - 130	
Diesel Range Organics (Over C10-C28)	122		996	951.4		mg/Kg		83	70 - 130	

Lab Sample ID: 890-3030-21 MSD

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35279

	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	26.0	J B	999	1113		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	122		999	973.7		mg/Kg		85	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	97		70 - 130								

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Lab Sample ID: 890-3030-21 MSD

Matrix: Solid

Analysis Batch: 35324

Client Sample ID: BH21

Prep Type: Total/NA

Prep Batch: 35279

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	91		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34992/1-A

Matrix: Solid

Analysis Batch: 35275

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	0.858	mg/Kg			09/23/22 14:02	1	

Lab Sample ID: LCS 880-34992/2-A

Matrix: Solid

Analysis Batch: 35275

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	245.7		mg/Kg		98	90 - 110	

Lab Sample ID: LCSD 880-34992/3-A

Matrix: Solid

Analysis Batch: 35275

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec	RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	Limit
Chloride			250	246.7		mg/Kg		99	90 - 110	0 20

Lab Sample ID: MB 880-35273/1-A

Matrix: Solid

Analysis Batch: 35457

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	0.858	mg/Kg			09/27/22 04:42	1	

Lab Sample ID: LCS 880-35273/2-A

Matrix: Solid

Analysis Batch: 35457

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	266.0		mg/Kg		106	90 - 110	

Lab Sample ID: LCSD 880-35273/3-A

Matrix: Solid

Analysis Batch: 35457

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec	RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	Limit
Chloride			250	266.8		mg/Kg		107	90 - 110	0 20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3030-3 MS

Matrix: Solid

Analysis Batch: 35457

Client Sample ID: BH3

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	22.6		251	280.5		mg/Kg		103	90 - 110		

Lab Sample ID: 890-3030-3 MSD

Matrix: Solid

Analysis Batch: 35457

Client Sample ID: BH3

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22.6		251	272.1		mg/Kg		99	90 - 110	3	20

Lab Sample ID: MB 880-35272/1-A

Matrix: Solid

Analysis Batch: 35497

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.858	mg/Kg			09/27/22 11:47	1

Lab Sample ID: LCS 880-35272/2-A

Matrix: Solid

Analysis Batch: 35497

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	236.8		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-35272/3-A

Matrix: Solid

Analysis Batch: 35497

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	237.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-3030-13 MS

Matrix: Solid

Analysis Batch: 35497

Client Sample ID: BH13

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	23.3		249	251.0		mg/Kg		92	90 - 110		

Lab Sample ID: 890-3030-13 MSD

Matrix: Solid

Analysis Batch: 35497

Client Sample ID: BH13

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	23.3		249	251.6		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-3030-23 MS

Matrix: Solid

Analysis Batch: 35497

Client Sample ID: BH23

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	30.9		248	278.1		mg/Kg		100	90 - 110		

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3030-23 MSD							Client Sample ID: BH23					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 35497												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	30.9		248	278.3		mg/Kg		100	90 - 110	0	20	

QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC VOA

Prep Batch: 35684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	5035	
890-3030-2	BH2	Total/NA	Solid	5035	
890-3030-3	BH3	Total/NA	Solid	5035	
890-3030-4	BH4	Total/NA	Solid	5035	
890-3030-5	BH5	Total/NA	Solid	5035	
890-3030-6	BH6	Total/NA	Solid	5035	
890-3030-7	BH7	Total/NA	Solid	5035	
890-3030-8	BH8	Total/NA	Solid	5035	
890-3030-9	BH9	Total/NA	Solid	5035	
890-3030-10	BH10	Total/NA	Solid	5035	
890-3030-11	BH11	Total/NA	Solid	5035	
890-3030-12	BH12	Total/NA	Solid	5035	
890-3030-13	BH13	Total/NA	Solid	5035	
890-3030-14	BH14	Total/NA	Solid	5035	
890-3030-15	BH15	Total/NA	Solid	5035	
890-3030-16	BH16	Total/NA	Solid	5035	
890-3030-17	BH17	Total/NA	Solid	5035	
890-3030-18	BH18	Total/NA	Solid	5035	
890-3030-19	BH19	Total/NA	Solid	5035	
890-3030-20	BH20	Total/NA	Solid	5035	
MB 880-35684/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35684/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35684/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3030-2 MS	BH2	Total/NA	Solid	5035	
890-3030-2 MSD	BH2	Total/NA	Solid	5035	

Prep Batch: 35686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-21	BH21	Total/NA	Solid	5035	
890-3030-22	BH22	Total/NA	Solid	5035	
890-3030-23	BH23	Total/NA	Solid	5035	
890-3030-24	BH24	Total/NA	Solid	5035	
890-3030-25	BH25	Total/NA	Solid	5035	
890-3030-26	BH26	Total/NA	Solid	5035	
890-3030-27	BH27	Total/NA	Solid	5035	
890-3030-28	BH28	Total/NA	Solid	5035	
890-3030-29	BH29	Total/NA	Solid	5035	
890-3030-30	BH30	Total/NA	Solid	5035	
890-3030-31	BH31	Total/NA	Solid	5035	
890-3030-32	BH32	Total/NA	Solid	5035	
890-3030-33	BH33	Total/NA	Solid	5035	
890-3030-34	SW1	Total/NA	Solid	5035	
890-3030-35	SW2	Total/NA	Solid	5035	
890-3030-36	SW3	Total/NA	Solid	5035	
MB 880-35686/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35686/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35686/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3030-21 MS	BH21	Total/NA	Solid	5035	
890-3030-21 MSD	BH21	Total/NA	Solid	5035	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC VOA

Prep Batch: 35691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35691/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 35815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	8021B	35684
890-3030-2	BH2	Total/NA	Solid	8021B	35684
890-3030-3	BH3	Total/NA	Solid	8021B	35684
890-3030-4	BH4	Total/NA	Solid	8021B	35684
890-3030-5	BH5	Total/NA	Solid	8021B	35684
890-3030-6	BH6	Total/NA	Solid	8021B	35684
890-3030-7	BH7	Total/NA	Solid	8021B	35684
890-3030-8	BH8	Total/NA	Solid	8021B	35684
890-3030-9	BH9	Total/NA	Solid	8021B	35684
890-3030-10	BH10	Total/NA	Solid	8021B	35684
890-3030-11	BH11	Total/NA	Solid	8021B	35684
890-3030-12	BH12	Total/NA	Solid	8021B	35684
890-3030-13	BH13	Total/NA	Solid	8021B	35684
890-3030-14	BH14	Total/NA	Solid	8021B	35684
890-3030-15	BH15	Total/NA	Solid	8021B	35684
890-3030-16	BH16	Total/NA	Solid	8021B	35684
890-3030-17	BH17	Total/NA	Solid	8021B	35684
890-3030-18	BH18	Total/NA	Solid	8021B	35684
890-3030-19	BH19	Total/NA	Solid	8021B	35684
890-3030-20	BH20	Total/NA	Solid	8021B	35684
MB 880-35684/5-A	Method Blank	Total/NA	Solid	8021B	35684
MB 880-35691/5-A	Method Blank	Total/NA	Solid	8021B	35691
LCS 880-35684/1-A	Lab Control Sample	Total/NA	Solid	8021B	35684
LCSD 880-35684/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35684
890-3030-2 MS	BH2	Total/NA	Solid	8021B	35684
890-3030-2 MSD	BH2	Total/NA	Solid	8021B	35684

Analysis Batch: 35919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-21	BH21	Total/NA	Solid	8021B	35686
890-3030-22	BH22	Total/NA	Solid	8021B	35686
890-3030-23	BH23	Total/NA	Solid	8021B	35686
890-3030-24	BH24	Total/NA	Solid	8021B	35686
890-3030-25	BH25	Total/NA	Solid	8021B	35686
890-3030-26	BH26	Total/NA	Solid	8021B	35686
890-3030-27	BH27	Total/NA	Solid	8021B	35686
890-3030-28	BH28	Total/NA	Solid	8021B	35686
890-3030-29	BH29	Total/NA	Solid	8021B	35686
890-3030-30	BH30	Total/NA	Solid	8021B	35686
890-3030-31	BH31	Total/NA	Solid	8021B	35686
890-3030-32	BH32	Total/NA	Solid	8021B	35686
890-3030-33	BH33	Total/NA	Solid	8021B	35686
890-3030-34	SW1	Total/NA	Solid	8021B	35686
890-3030-35	SW2	Total/NA	Solid	8021B	35686
890-3030-36	SW3	Total/NA	Solid	8021B	35686
MB 880-35686/5-A	Method Blank	Total/NA	Solid	8021B	35686
LCS 880-35686/1-A	Lab Control Sample	Total/NA	Solid	8021B	35686

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC VOA (Continued)

Analysis Batch: 35919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS8 880-35686/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35686
890-3030-21 MS	BH21	Total/NA	Solid	8021B	35686
890-3030-21 MSD	BH21	Total/NA	Solid	8021B	35686

Analysis Batch: 36036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	Total BTEX	
890-3030-2	BH2	Total/NA	Solid	Total BTEX	
890-3030-3	BH3	Total/NA	Solid	Total BTEX	
890-3030-4	BH4	Total/NA	Solid	Total BTEX	
890-3030-5	BH5	Total/NA	Solid	Total BTEX	
890-3030-6	BH6	Total/NA	Solid	Total BTEX	
890-3030-7	BH7	Total/NA	Solid	Total BTEX	
890-3030-8	BH8	Total/NA	Solid	Total BTEX	
890-3030-9	BH9	Total/NA	Solid	Total BTEX	
890-3030-10	BH10	Total/NA	Solid	Total BTEX	
890-3030-11	BH11	Total/NA	Solid	Total BTEX	
890-3030-12	BH12	Total/NA	Solid	Total BTEX	
890-3030-13	BH13	Total/NA	Solid	Total BTEX	
890-3030-14	BH14	Total/NA	Solid	Total BTEX	
890-3030-15	BH15	Total/NA	Solid	Total BTEX	
890-3030-16	BH16	Total/NA	Solid	Total BTEX	
890-3030-17	BH17	Total/NA	Solid	Total BTEX	
890-3030-18	BH18	Total/NA	Solid	Total BTEX	
890-3030-19	BH19	Total/NA	Solid	Total BTEX	
890-3030-20	BH20	Total/NA	Solid	Total BTEX	
890-3030-21	BH21	Total/NA	Solid	Total BTEX	
890-3030-22	BH22	Total/NA	Solid	Total BTEX	
890-3030-23	BH23	Total/NA	Solid	Total BTEX	
890-3030-24	BH24	Total/NA	Solid	Total BTEX	
890-3030-25	BH25	Total/NA	Solid	Total BTEX	
890-3030-26	BH26	Total/NA	Solid	Total BTEX	
890-3030-27	BH27	Total/NA	Solid	Total BTEX	
890-3030-28	BH28	Total/NA	Solid	Total BTEX	
890-3030-29	BH29	Total/NA	Solid	Total BTEX	
890-3030-30	BH30	Total/NA	Solid	Total BTEX	
890-3030-31	BH31	Total/NA	Solid	Total BTEX	
890-3030-32	BH32	Total/NA	Solid	Total BTEX	
890-3030-33	BH33	Total/NA	Solid	Total BTEX	
890-3030-34	SW1	Total/NA	Solid	Total BTEX	
890-3030-35	SW2	Total/NA	Solid	Total BTEX	
890-3030-36	SW3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 35263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-35	SW2	Total/NA	Solid	8015NM Prep	
890-3030-36	SW3	Total/NA	Solid	8015NM Prep	
MB 880-35263/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35263/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC Semi VOA (Continued)

Prep Batch: 35263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-35263/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 35278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	8015NM Prep	
890-3030-2	BH2	Total/NA	Solid	8015NM Prep	
890-3030-3	BH3	Total/NA	Solid	8015NM Prep	
890-3030-4	BH4	Total/NA	Solid	8015NM Prep	
890-3030-5	BH5	Total/NA	Solid	8015NM Prep	
890-3030-6	BH6	Total/NA	Solid	8015NM Prep	
890-3030-7	BH7	Total/NA	Solid	8015NM Prep	
890-3030-8	BH8	Total/NA	Solid	8015NM Prep	
890-3030-9	BH9	Total/NA	Solid	8015NM Prep	
890-3030-10	BH10	Total/NA	Solid	8015NM Prep	
890-3030-11	BH11	Total/NA	Solid	8015NM Prep	
890-3030-12	BH12	Total/NA	Solid	8015NM Prep	
890-3030-13	BH13	Total/NA	Solid	8015NM Prep	
890-3030-14	BH14	Total/NA	Solid	8015NM Prep	
890-3030-15	BH15	Total/NA	Solid	8015NM Prep	
890-3030-16	BH16	Total/NA	Solid	8015NM Prep	
890-3030-17	BH17	Total/NA	Solid	8015NM Prep	
890-3030-18	BH18	Total/NA	Solid	8015NM Prep	
890-3030-19	BH19	Total/NA	Solid	8015NM Prep	
890-3030-20	BH20	Total/NA	Solid	8015NM Prep	
MB 880-35278/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35278/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35278/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3030-1 MS	BH1	Total/NA	Solid	8015NM Prep	
890-3030-1 MSD	BH1	Total/NA	Solid	8015NM Prep	

Prep Batch: 35279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-21	BH21	Total/NA	Solid	8015NM Prep	
890-3030-22	BH22	Total/NA	Solid	8015NM Prep	
890-3030-23	BH23	Total/NA	Solid	8015NM Prep	
890-3030-24	BH24	Total/NA	Solid	8015NM Prep	
890-3030-25	BH25	Total/NA	Solid	8015NM Prep	
890-3030-26	BH26	Total/NA	Solid	8015NM Prep	
890-3030-27	BH27	Total/NA	Solid	8015NM Prep	
890-3030-28	BH28	Total/NA	Solid	8015NM Prep	
890-3030-29	BH29	Total/NA	Solid	8015NM Prep	
890-3030-30	BH30	Total/NA	Solid	8015NM Prep	
890-3030-31	BH31	Total/NA	Solid	8015NM Prep	
890-3030-32	BH32	Total/NA	Solid	8015NM Prep	
890-3030-33	BH33	Total/NA	Solid	8015NM Prep	
890-3030-34	SW1	Total/NA	Solid	8015NM Prep	
MB 880-35279/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35279/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35279/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3030-21 MS	BH21	Total/NA	Solid	8015NM Prep	
890-3030-21 MSD	BH21	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC Semi VOA

Analysis Batch: 35322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-35	SW2	Total/NA	Solid	8015B NM	35263
890-3030-36	SW3	Total/NA	Solid	8015B NM	35263
MB 880-35263/1-A	Method Blank	Total/NA	Solid	8015B NM	35263
LCS 880-35263/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35263
LCSD 880-35263/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35263

Analysis Batch: 35324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	8015B NM	35278
890-3030-2	BH2	Total/NA	Solid	8015B NM	35278
890-3030-3	BH3	Total/NA	Solid	8015B NM	35278
890-3030-4	BH4	Total/NA	Solid	8015B NM	35278
890-3030-5	BH5	Total/NA	Solid	8015B NM	35278
890-3030-6	BH6	Total/NA	Solid	8015B NM	35278
890-3030-7	BH7	Total/NA	Solid	8015B NM	35278
890-3030-8	BH8	Total/NA	Solid	8015B NM	35278
890-3030-9	BH9	Total/NA	Solid	8015B NM	35278
890-3030-10	BH10	Total/NA	Solid	8015B NM	35278
890-3030-11	BH11	Total/NA	Solid	8015B NM	35278
890-3030-12	BH12	Total/NA	Solid	8015B NM	35278
890-3030-13	BH13	Total/NA	Solid	8015B NM	35278
890-3030-14	BH14	Total/NA	Solid	8015B NM	35278
890-3030-15	BH15	Total/NA	Solid	8015B NM	35278
890-3030-16	BH16	Total/NA	Solid	8015B NM	35278
890-3030-17	BH17	Total/NA	Solid	8015B NM	35278
890-3030-18	BH18	Total/NA	Solid	8015B NM	35278
890-3030-19	BH19	Total/NA	Solid	8015B NM	35278
890-3030-20	BH20	Total/NA	Solid	8015B NM	35278
890-3030-21	BH21	Total/NA	Solid	8015B NM	35279
890-3030-22	BH22	Total/NA	Solid	8015B NM	35279
890-3030-23	BH23	Total/NA	Solid	8015B NM	35279
890-3030-24	BH24	Total/NA	Solid	8015B NM	35279
890-3030-25	BH25	Total/NA	Solid	8015B NM	35279
890-3030-26	BH26	Total/NA	Solid	8015B NM	35279
890-3030-27	BH27	Total/NA	Solid	8015B NM	35279
890-3030-28	BH28	Total/NA	Solid	8015B NM	35279
890-3030-29	BH29	Total/NA	Solid	8015B NM	35279
890-3030-30	BH30	Total/NA	Solid	8015B NM	35279
890-3030-31	BH31	Total/NA	Solid	8015B NM	35279
890-3030-32	BH32	Total/NA	Solid	8015B NM	35279
890-3030-33	BH33	Total/NA	Solid	8015B NM	35279
890-3030-34	SW1	Total/NA	Solid	8015B NM	35279
MB 880-35278/1-A	Method Blank	Total/NA	Solid	8015B NM	35278
MB 880-35279/1-A	Method Blank	Total/NA	Solid	8015B NM	35279
LCS 880-35278/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35278
LCS 880-35279/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35279
LCSD 880-35278/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35278
LCSD 880-35279/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35279
890-3030-1 MS	BH1	Total/NA	Solid	8015B NM	35278
890-3030-1 MSD	BH1	Total/NA	Solid	8015B NM	35278
890-3030-21 MS	BH21	Total/NA	Solid	8015B NM	35279

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

GC Semi VOA (Continued)

Analysis Batch: 35324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-21 MSD	BH21	Total/NA	Solid	8015B NM	35279

Analysis Batch: 35399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Total/NA	Solid	8015 NM	
890-3030-2	BH2	Total/NA	Solid	8015 NM	
890-3030-3	BH3	Total/NA	Solid	8015 NM	
890-3030-4	BH4	Total/NA	Solid	8015 NM	
890-3030-5	BH5	Total/NA	Solid	8015 NM	
890-3030-6	BH6	Total/NA	Solid	8015 NM	
890-3030-7	BH7	Total/NA	Solid	8015 NM	
890-3030-8	BH8	Total/NA	Solid	8015 NM	
890-3030-9	BH9	Total/NA	Solid	8015 NM	
890-3030-10	BH10	Total/NA	Solid	8015 NM	
890-3030-11	BH11	Total/NA	Solid	8015 NM	
890-3030-12	BH12	Total/NA	Solid	8015 NM	
890-3030-13	BH13	Total/NA	Solid	8015 NM	
890-3030-14	BH14	Total/NA	Solid	8015 NM	
890-3030-15	BH15	Total/NA	Solid	8015 NM	
890-3030-16	BH16	Total/NA	Solid	8015 NM	
890-3030-17	BH17	Total/NA	Solid	8015 NM	
890-3030-18	BH18	Total/NA	Solid	8015 NM	
890-3030-19	BH19	Total/NA	Solid	8015 NM	
890-3030-20	BH20	Total/NA	Solid	8015 NM	
890-3030-21	BH21	Total/NA	Solid	8015 NM	
890-3030-22	BH22	Total/NA	Solid	8015 NM	
890-3030-23	BH23	Total/NA	Solid	8015 NM	
890-3030-24	BH24	Total/NA	Solid	8015 NM	
890-3030-25	BH25	Total/NA	Solid	8015 NM	
890-3030-26	BH26	Total/NA	Solid	8015 NM	
890-3030-27	BH27	Total/NA	Solid	8015 NM	
890-3030-28	BH28	Total/NA	Solid	8015 NM	
890-3030-29	BH29	Total/NA	Solid	8015 NM	
890-3030-30	BH30	Total/NA	Solid	8015 NM	
890-3030-31	BH31	Total/NA	Solid	8015 NM	
890-3030-32	BH32	Total/NA	Solid	8015 NM	
890-3030-33	BH33	Total/NA	Solid	8015 NM	
890-3030-34	SW1	Total/NA	Solid	8015 NM	
890-3030-35	SW2	Total/NA	Solid	8015 NM	
890-3030-36	SW3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-33	BH33	Soluble	Solid	DI Leach	
890-3030-34	SW1	Soluble	Solid	DI Leach	
890-3030-35	SW2	Soluble	Solid	DI Leach	
890-3030-36	SW3	Soluble	Solid	DI Leach	
MB 880-34992/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34992/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

HPLC/IC (Continued)

Leach Batch: 34992 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-34992/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 35272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-13	BH13	Soluble	Solid	DI Leach	
890-3030-14	BH14	Soluble	Solid	DI Leach	
890-3030-15	BH15	Soluble	Solid	DI Leach	
890-3030-16	BH16	Soluble	Solid	DI Leach	
890-3030-17	BH17	Soluble	Solid	DI Leach	
890-3030-18	BH18	Soluble	Solid	DI Leach	
890-3030-19	BH19	Soluble	Solid	DI Leach	
890-3030-20	BH20	Soluble	Solid	DI Leach	
890-3030-21	BH21	Soluble	Solid	DI Leach	
890-3030-22	BH22	Soluble	Solid	DI Leach	
890-3030-23	BH23	Soluble	Solid	DI Leach	
890-3030-24	BH24	Soluble	Solid	DI Leach	
890-3030-25	BH25	Soluble	Solid	DI Leach	
890-3030-26	BH26	Soluble	Solid	DI Leach	
890-3030-27	BH27	Soluble	Solid	DI Leach	
890-3030-28	BH28	Soluble	Solid	DI Leach	
890-3030-29	BH29	Soluble	Solid	DI Leach	
890-3030-30	BH30	Soluble	Solid	DI Leach	
890-3030-31	BH31	Soluble	Solid	DI Leach	
890-3030-32	BH32	Soluble	Solid	DI Leach	
MB 880-35272/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35272/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35272/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3030-13 MS	BH13	Soluble	Solid	DI Leach	
890-3030-13 MSD	BH13	Soluble	Solid	DI Leach	
890-3030-23 MS	BH23	Soluble	Solid	DI Leach	
890-3030-23 MSD	BH23	Soluble	Solid	DI Leach	

Leach Batch: 35273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Soluble	Solid	DI Leach	
890-3030-2	BH2	Soluble	Solid	DI Leach	
890-3030-3	BH3	Soluble	Solid	DI Leach	
890-3030-4	BH4	Soluble	Solid	DI Leach	
890-3030-5	BH5	Soluble	Solid	DI Leach	
890-3030-6	BH6	Soluble	Solid	DI Leach	
890-3030-7	BH7	Soluble	Solid	DI Leach	
890-3030-8	BH8	Soluble	Solid	DI Leach	
890-3030-9	BH9	Soluble	Solid	DI Leach	
890-3030-10	BH10	Soluble	Solid	DI Leach	
890-3030-11	BH11	Soluble	Solid	DI Leach	
890-3030-12	BH12	Soluble	Solid	DI Leach	
MB 880-35273/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35273/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35273/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3030-3 MS	BH3	Soluble	Solid	DI Leach	
890-3030-3 MSD	BH3	Soluble	Solid	DI Leach	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

HPLC/IC

Analysis Batch: 35275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-33	BH33	Soluble	Solid	300.0	34992
890-3030-34	SW1	Soluble	Solid	300.0	34992
890-3030-35	SW2	Soluble	Solid	300.0	34992
890-3030-36	SW3	Soluble	Solid	300.0	34992
MB 880-34992/1-A	Method Blank	Soluble	Solid	300.0	34992
LCS 880-34992/2-A	Lab Control Sample	Soluble	Solid	300.0	34992
LCSD 880-34992/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34992

Analysis Batch: 35273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-1	BH1	Soluble	Solid	300.0	35273
890-3030-2	BH2	Soluble	Solid	300.0	35273
890-3030-3	BH3	Soluble	Solid	300.0	35273
890-3030-4	BH4	Soluble	Solid	300.0	35273
890-3030-5	BH5	Soluble	Solid	300.0	35273
890-3030-6	BH6	Soluble	Solid	300.0	35273
890-3030-7	BH7	Soluble	Solid	300.0	35273
890-3030-8	BH8	Soluble	Solid	300.0	35273
890-3030-9	BH9	Soluble	Solid	300.0	35273
890-3030-10	BH10	Soluble	Solid	300.0	35273
890-3030-11	BH11	Soluble	Solid	300.0	35273
890-3030-12	BH12	Soluble	Solid	300.0	35273
MB 880-35273/1-A	Method Blank	Soluble	Solid	300.0	35273
LCS 880-35273/2-A	Lab Control Sample	Soluble	Solid	300.0	35273
LCSD 880-35273/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35273
890-3030-3 MS	BH3	Soluble	Solid	300.0	35273
890-3030-3 MSD	BH3	Soluble	Solid	300.0	35273

Analysis Batch: 35497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3030-13	BH13	Soluble	Solid	300.0	35272
890-3030-14	BH14	Soluble	Solid	300.0	35272
890-3030-15	BH15	Soluble	Solid	300.0	35272
890-3030-16	BH16	Soluble	Solid	300.0	35272
890-3030-17	BH17	Soluble	Solid	300.0	35272
890-3030-18	BH18	Soluble	Solid	300.0	35272
890-3030-19	BH19	Soluble	Solid	300.0	35272
890-3030-20	BH20	Soluble	Solid	300.0	35272
890-3030-21	BH21	Soluble	Solid	300.0	35272
890-3030-22	BH22	Soluble	Solid	300.0	35272
890-3030-23	BH23	Soluble	Solid	300.0	35272
890-3030-24	BH24	Soluble	Solid	300.0	35272
890-3030-25	BH25	Soluble	Solid	300.0	35272
890-3030-26	BH26	Soluble	Solid	300.0	35272
890-3030-27	BH27	Soluble	Solid	300.0	35272
890-3030-28	BH28	Soluble	Solid	300.0	35272
890-3030-29	BH29	Soluble	Solid	300.0	35272
890-3030-30	BH30	Soluble	Solid	300.0	35272
890-3030-31	BH31	Soluble	Solid	300.0	35272
890-3030-32	BH32	Soluble	Solid	300.0	35272
MB 880-35272/1-A	Method Blank	Soluble	Solid	300.0	35272

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

HPLC/IC (Continued)

Analysis Batch: 35497 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-35272/2-A	Lab Control Sample	Soluble	Solid	300.0	35272
LCSD 880-35272/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35272
890-3030-13 MS	BH13	Soluble	Solid	300.0	35272
890-3030-13 MSD	BH13	Soluble	Solid	300.0	35272
890-3030-23 MS	BH23	Soluble	Solid	300.0	35272
890-3030-23 MSD	BH23	Soluble	Solid	300.0	35272

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH1
Date Collected: 09/20/22 12:00
Date Received: 09/22/22 09:34

Lab Sample ID: 890-3030-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 16:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 11:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 06:15	CH	EET MID

Client Sample ID: BH2
Date Collected: 09/20/22 12:05
Date Received: 09/22/22 09:34

Lab Sample ID: 890-3030-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 11:24	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 12:48	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 06:21	CH	EET MID

Client Sample ID: BH3
Date Collected: 09/20/22 12:10
Date Received: 09/22/22 09:34

Lab Sample ID: 890-3030-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 17:19	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 13:09	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 06:27	CH	EET MID

Client Sample ID: BH4
Date Collected: 09/20/22 12:15
Date Received: 09/22/22 09:34

Lab Sample ID: 890-3030-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 17:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH4

Lab Sample ID: 890-3030-4

Date Collected: 09/20/22 12:15

Matrix: Solid

Date Received: 09/22/22 09:34

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			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 13:31	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 06:46	CH	EET MID

Client Sample ID: BH5

Lab Sample ID: 890-3030-5

Date Collected: 09/20/22 12:20

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 18:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 13:53	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 06:52	CH	EET MID

Client Sample ID: BH6

Lab Sample ID: 890-3030-6

Date Collected: 09/20/22 12:25

Matrix: Solid

Date Received: 09/22/22 09:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 11:45	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 14:15	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:11	CH	EET MID

Client Sample ID: BH7

Lab Sample ID: 890-3030-7

Date Collected: 09/20/22 12:30

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 12:05	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 14:37	SM	EET MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH7

Lab Sample ID: 890-3030-7

Date Collected: 09/20/22 12:30

Matrix: Solid

Date Received: 09/22/22 09:34

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	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:17	CH	EET MID

Client Sample ID: BH8

Lab Sample ID: 890-3030-8

Date Collected: 09/20/22 12:35

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 18:21	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 14:59	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:23	CH	EET MID

Client Sample ID: BH9

Lab Sample ID: 890-3030-9

Date Collected: 09/20/22 12:40

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 12:25	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 15:21	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:29	CH	EET MID

Client Sample ID: BH10

Lab Sample ID: 890-3030-10

Date Collected: 09/20/22 12:45

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 12:46	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 15:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:35	CH	EET MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH11

Lab Sample ID: 890-3030-11

Date Collected: 09/20/22 12:50

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 20:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 16:27	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:42	CH	EET MID

Client Sample ID: BH12

Lab Sample ID: 890-3030-12

Date Collected: 09/20/22 12:55

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 20:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 11:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35457	09/27/22 07:48	CH	EET MID

Client Sample ID: BH13

Lab Sample ID: 890-3030-13

Date Collected: 09/20/22 13:00

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 22:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 17:11	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:01	CH	EET MID

Client Sample ID: BH14

Lab Sample ID: 890-3030-14

Date Collected: 09/20/22 13:05

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 20:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH14

Lab Sample ID: 890-3030-14

Date Collected: 09/20/22 13:05

Matrix: Solid

Date Received: 09/22/22 09:34

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			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 11:35	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:16	CH	EET MID

Client Sample ID: BH15

Lab Sample ID: 890-3030-15

Date Collected: 09/20/22 13:10

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 21:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 11:57	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:21	CH	EET MID

Client Sample ID: BH16

Lab Sample ID: 890-3030-16

Date Collected: 09/20/22 13:15

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 21:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 12:18	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:25	CH	EET MID

Client Sample ID: BH17

Lab Sample ID: 890-3030-17

Date Collected: 09/20/22 13:20

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 21:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 18:40	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH17

Lab Sample ID: 890-3030-17

Date Collected: 09/20/22 13:20

Matrix: Solid

Date Received: 09/22/22 09:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:30	CH	EET MID

Client Sample ID: BH18

Lab Sample ID: 890-3030-18

Date Collected: 09/20/22 13:25

Matrix: Solid

Date Received: 09/22/22 09:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		5	5 mL	5 mL	35815	10/03/22 22:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 19:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:45	CH	EET MID

Client Sample ID: BH19

Lab Sample ID: 890-3030-19

Date Collected: 09/20/22 13:30

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35815	10/03/22 22:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 12:40	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:50	CH	EET MID

Client Sample ID: BH20

Lab Sample ID: 890-3030-20

Date Collected: 09/20/22 13:35

Matrix: Solid

Date Received: 09/22/22 09:34

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	35684	09/29/22 11:26	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35815	10/03/22 23:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35278	09/23/22 13:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 13:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 12:55	CH	EET MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH21

Lab Sample ID: 890-3030-21

Date Collected: 09/20/22 13:40

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/03/22 19:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 13:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:00	CH	EET MID

Client Sample ID: BH22

Lab Sample ID: 890-3030-22

Date Collected: 09/20/22 13:45

Matrix: Solid

Date Received: 09/22/22 09:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35919	10/03/22 21:17	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 22:42	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:04	CH	EET MID

Client Sample ID: BH23

Lab Sample ID: 890-3030-23

Date Collected: 09/20/22 13:50

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/03/22 19:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 23:03	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:09	CH	EET MID

Client Sample ID: BH24

Lab Sample ID: 890-3030-24

Date Collected: 09/20/22 13:55

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35919	10/03/22 21:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID

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Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH24

Lab Sample ID: 890-3030-24

Date Collected: 09/20/22 13:55

Matrix: Solid

Date Received: 09/22/22 09:34

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			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 23:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:24	CH	EET MID

Client Sample ID: BH25

Lab Sample ID: 890-3030-25

Date Collected: 09/20/22 14:00

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35919	10/03/22 21:58	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/24/22 23:45	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:29	CH	EET MID

Client Sample ID: BH26

Lab Sample ID: 890-3030-26

Date Collected: 09/20/22 14:05

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35919	10/03/22 22:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 00:06	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:43	CH	EET MID

Client Sample ID: BH27

Lab Sample ID: 890-3030-27

Date Collected: 09/20/22 14:10

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/03/22 23:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 00:27	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH27

Lab Sample ID: 890-3030-27

Date Collected: 09/20/22 14:10

Matrix: Solid

Date Received: 09/22/22 09:34

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	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:48	CH	EET MID

Client Sample ID: BH28

Lab Sample ID: 890-3030-28

Date Collected: 09/20/22 14:15

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 00:01	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 00:49	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:53	CH	EET MID

Client Sample ID: BH29

Lab Sample ID: 890-3030-29

Date Collected: 09/20/22 14:20

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 00:21	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 01:10	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 13:58	CH	EET MID

Client Sample ID: BH30

Lab Sample ID: 890-3030-30

Date Collected: 09/20/22 14:25

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 00:42	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 01:31	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 14:03	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: BH31

Lab Sample ID: 890-3030-31

Date Collected: 09/20/22 14:30

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 01:02	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 02:13	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 14:07	CH	EET MID

Client Sample ID: BH32

Lab Sample ID: 890-3030-32

Date Collected: 09/20/22 14:35

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 01:23	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 02:34	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35272	09/23/22 12:05	KS	EET MID
Soluble	Analysis	300.0		1			35497	09/27/22 14:12	CH	EET MID

Client Sample ID: BH33

Lab Sample ID: 890-3030-33

Date Collected: 09/20/22 14:40

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 01:43	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 02:55	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34992	09/23/22 11:44	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35275	09/23/22 16:14	CH	EET MID

Client Sample ID: SW1

Lab Sample ID: 890-3030-34

Date Collected: 09/20/22 14:45

Matrix: Solid

Date Received: 09/22/22 09:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 02:03	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Client Sample ID: SW1

Lab Sample ID: 890-3030-34

Date Collected: 09/20/22 14:45

Matrix: Solid

Date Received: 09/22/22 09:34

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			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35279	09/23/22 13:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35324	09/25/22 03:17	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34992	09/23/22 11:44	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35275	09/23/22 16:18	CH	EET MID

Client Sample ID: SW2

Lab Sample ID: 890-3030-35

Date Collected: 09/20/22 14:50

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35919	10/04/22 02:24	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35263	09/23/22 11:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35322	09/25/22 05:03	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34992	09/23/22 11:44	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35275	09/23/22 16:23	CH	EET MID

Client Sample ID: SW3

Lab Sample ID: 890-3030-36

Date Collected: 09/20/22 14:55

Matrix: Solid

Date Received: 09/22/22 09:34

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	35686	09/29/22 11:29	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	35919	10/04/22 02:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36036	10/04/22 09:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35399	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35263	09/23/22 11:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35322	09/25/22 05:24	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34992	09/23/22 11:44	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	35275	09/23/22 16:28	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: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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

Method Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

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: GHD Services Inc.
Project/Site: Delek - Outland Booster

Job ID: 890-3030-1
SDG: 12594900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3030-1	BH1	Solid	09/20/22 12:00	09/22/22 09:34	4
890-3030-2	BH2	Solid	09/20/22 12:05	09/22/22 09:34	4
890-3030-3	BH3	Solid	09/20/22 12:10	09/22/22 09:34	4
890-3030-4	BH4	Solid	09/20/22 12:15	09/22/22 09:34	4
890-3030-5	BH5	Solid	09/20/22 12:20	09/22/22 09:34	4
890-3030-6	BH6	Solid	09/20/22 12:25	09/22/22 09:34	4
890-3030-7	BH7	Solid	09/20/22 12:30	09/22/22 09:34	4
890-3030-8	BH8	Solid	09/20/22 12:35	09/22/22 09:34	4
890-3030-9	BH9	Solid	09/20/22 12:40	09/22/22 09:34	4
890-3030-10	BH10	Solid	09/20/22 12:45	09/22/22 09:34	4
890-3030-11	BH11	Solid	09/20/22 12:50	09/22/22 09:34	4
890-3030-12	BH12	Solid	09/20/22 12:55	09/22/22 09:34	4
890-3030-13	BH13	Solid	09/20/22 13:00	09/22/22 09:34	1
890-3030-14	BH14	Solid	09/20/22 13:05	09/22/22 09:34	1
890-3030-15	BH15	Solid	09/20/22 13:10	09/22/22 09:34	1
890-3030-16	BH16	Solid	09/20/22 13:15	09/22/22 09:34	1
890-3030-17	BH17	Solid	09/20/22 13:20	09/22/22 09:34	1
890-3030-18	BH18	Solid	09/20/22 13:25	09/22/22 09:34	1
890-3030-19	BH19	Solid	09/20/22 13:30	09/22/22 09:34	1
890-3030-20	BH20	Solid	09/20/22 13:35	09/22/22 09:34	1
890-3030-21	BH21	Solid	09/20/22 13:40	09/22/22 09:34	1
890-3030-22	BH22	Solid	09/20/22 13:45	09/22/22 09:34	1
890-3030-23	BH23	Solid	09/20/22 13:50	09/22/22 09:34	1
890-3030-24	BH24	Solid	09/20/22 13:55	09/22/22 09:34	1
890-3030-25	BH25	Solid	09/20/22 14:00	09/22/22 09:34	1
890-3030-26	BH26	Solid	09/20/22 14:05	09/22/22 09:34	1
890-3030-27	BH27	Solid	09/20/22 14:10	09/22/22 09:34	1
890-3030-28	BH28	Solid	09/20/22 14:15	09/22/22 09:34	1
890-3030-29	BH29	Solid	09/20/22 14:20	09/22/22 09:34	1
890-3030-30	BH30	Solid	09/20/22 14:25	09/22/22 09:34	1
890-3030-31	BH31	Solid	09/20/22 14:30	09/22/22 09:34	1
890-3030-32	BH32	Solid	09/20/22 14:35	09/22/22 09:34	1
890-3030-33	BH33	Solid	09/20/22 14:40	09/22/22 09:34	1
890-3030-34	SW1	Solid	09/20/22 14:45	09/22/22 09:34	0 - 4
890-3030-35	SW2	Solid	09/20/22 14:50	09/22/22 09:34	0 - 4
890-3030-36	SW3	Solid	09/20/22 14:55	09/22/22 09:34	0 - 4



Environmental Testing

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Page 1 of 4

Project Manager:	Stephen Asante - Arroyo	Bill to: (if different)	invoicing - us @ghd.com
Company Name:	GHD	Company Name:	GHD
Address:	2055 Niagara Falls Blvd.	Address:	2055 Niagara Falls Blvd
City, State ZIP:	Niagara Falls, NY 14304	City, State ZIP:	Niagara Falls, NY 14304
Phone:	713-734-3040	Email:	stephen.asante-arroyo@ghd.com

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRF ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Delet Outland Basalt	Turn Around	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	12594900	☒ Routine ☐ Rush				None: NO ☐ DI Water: H ₂ O ☐
Project Location:	Enclave, NM 88231	Due Date:				Cool/Cool ☒ MeOH: Me ☐
Sampler's Name:	Liam Giersdorf	TAT starts the day received by the lab, if received by 4:30pm				HCL: HC ☐ HNO ₃ : HN ☐
PO #:		Wet Ice: ☒ Yes ☐ No				H ₂ SO ₄ : H ₂ ☐ NaOH: Na ☐
SAMPLE RECEIPT	Temp Blank: ☒ Yes ☐ No	Thermometer ID: TW007				H ₃ PO ₄ : HP ☐
Samples Received Intact:	☒ Yes ☐ No	Correction Factor: -0.2				NaHSO ₄ : NABIS ☐
Cooler Custody Seals:	☒ Yes ☐ No	Temperature Reading: 4.7				Na ₂ S ₂ O ₃ : NaSO ₃ ☐
Sample Custody Seals:	☒ Yes ☐ No	Corrected Temperature: 4.0				Zn Acetate+NaOH: Zn ☐
Total Containers:						NaOH+Ascorbic Acid: SAPC ☐



890-3030 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grav/Comp	# of Cont	Parameters	Sample Comments
BH1	Soil	0920	1200	4'			BTEX 80213	Please email
BH2			1205				TPH/GRO Mod 8015	results to
BH3			1210				TPH/DRO Mod 8015	it, murrey@ghd.com
BH4			1215				Chlorides 300	liam.giersdorf@ghd.com
BH5			1220					
BH6			1225					
BH7			1230					
BH8			1235					
BH9			1240					
BH10			1245					

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Released

by: Liam Giersdorf

092222 0840 CEC049.22.22840



Environment Testing
Xenoco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Page 2 of 4

Project Manager:	Stephen Asante - Ansong	Bill to: (if different)	invoicing-us@ghd.com
Company Name:	GHD	Company Name:	
Address:	2055 Niagara Falls Blvd.	Address:	
City, State ZIP:	Niagara Falls NY 14304	City, State ZIP:	
Phone:	713-734-3090	Email:	

Program: ☐ UST/PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRF ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Deltek Outland Booster	Turn Around	☒ Routine ☐ Rush	Pres. Code	ANALYSIS REQUEST																Preservative Codes		
Project Number:	12594900																				None: NO ☐ DI Water: H ₂ O ☐		
Project Location:	Enrico NM 88231	Due Date:																			COOL (Cool) ☐ MeOH: Me ☐		
Sampler's Name:	Liam Giersdorf	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 ☐
Samples Received Intact:	Yes	No	Thermometer ID:																				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:			Corrected Temperature:																				NaOH+Ascorbic Acid: SACP ☐
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																	Sample Comments
BH 11		5/1/2020	1250	4'			BTEx 8021B																
BH 12			1255	4'			TPH/GRO Mod 8015																
BH 13			1300	4'			TPH/DRO Mod 8015																
BH 14			1305				Chloride Method 300																
BH 15			1310																				
BH 16			1315																				
BH 17			1320																				
BH 18			1325																				
BH 19			1330																				
BH 20			1335																				

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Released by: Liam Giersdorf L. Giersdorf 092222 0840 CECUP 9.22.22 840 Amanda B. 0934



Environment Testing
Xenoco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

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Page 3 of 4

Project Manager:		Bill to: (if different)	
Company Name:		Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	

Program: ☐ PST ☐ PRF ☐ Brownfields ☐ RRD ☐ Superfund State of Project: _____ Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRF ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____		Work Order Comments _____ _____ _____
--	--	--

Project Name:	Project Number:	Turn Around		Pres. Code	ANALYSIS REQUEST													Preservative Codes			
		☐ Routine	☐ Rush		Due Date:														None: NO	DI Water: H ₂ O	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm																Cool: Cool	MeOH: Me		
Sampler's Name:																		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	
Samples Received Intact:	Yes	No	Thermometer ID:															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:	Yes	No	Corrected Temperature:															NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont														Sample Comments	
BH21	Soil	0920	1340	1'																	
BH22			1345																		
BH23			1350																		
BH24			1355																		
BH25			1400																		
BH26			1405																		
BH27			1410																		
BH28			1415																		
BH29			1420																		
BH30			1425																		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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Released by: Lian Giersden 0922 22 0846 Due 09:22 22 0940 Approved by: 0934



Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 4 of 4

Project Manager:		Bill to: (if different)	
Company Name:		Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	

Work Order Comments			
Program:	UST/PST ☐	PRF ☐	Brownfields ☐ RRD ☐ Superfund ☐
State of Project:			
Reporting:	Level II ☐	Level III ☐	PST/UST ☐ TRRF ☐ Level I ☐
Deliverables:	EDD ☐	Adapt ☐	Other:

[illegible]

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Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn																	
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		Hg: 1631 / 245.1 / 7470 / 7471																	

Released by Liam Gierstle

092222 0840 Perry 9.22.22 8:40

Amundson 0934

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3030-1

SDG Number: 12594900

Login Number: 3030

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.	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	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3030-1

SDG Number: 12594900

Login Number: 3030

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/23/22 10:43 AM

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	



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3041-1

Laboratory Sample Delivery Group: 12594900

Client Project/Site: Outland Booster

For:

GHD Services Inc.
11200 Richmond Ave
Suite 200
Houston, Texas 77082

Attn: Stephen Asante-Ansong

A handwritten signature in black ink, appearing to read "Debbie Simmons".

Authorized for release by:

10/10/2022 11:33:38 AM

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

Client: GHD Services Inc.
Project/Site: Outland Booster

Laboratory Job ID: 890-3041-1
SDG: 12594900

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Job ID: 890-3041-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3041-1

Comments

No additional comments.

Receipt

The samples were received on 9/23/2022 12:38 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 was 2.6° C.

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH03A (890-3041-1) and BH20A (890-3041-2). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-35460/3). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: BH03A (890-3041-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B NM: The method blank for preparation batch 880-35419 and analytical batch 880-35460 contained Diesel Range Organics (Over C10-C28) 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.

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Client Sample ID: BH03A

Lab Sample ID: 890-3041-1

Date Collected: 09/23/22 10:30

Matrix: Solid

Date Received: 09/23/22 12:38

Sample Depth: 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	0.000389	mg/Kg		10/04/22 16:09	10/07/22 00:43	1
Toluene	0.00158	J	0.00202	0.000461	mg/Kg		10/04/22 16:09	10/07/22 00:43	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		10/04/22 16:09	10/07/22 00:43	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		10/04/22 16:09	10/07/22 00:43	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		10/04/22 16:09	10/07/22 00:43	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		10/04/22 16:09	10/07/22 00:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	50	S1-	70 - 130	10/04/22 16:09	10/07/22 00:43	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/04/22 16:09	10/07/22 00:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00158	J	0.00404	0.00102	mg/Kg			10/07/22 10:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	37.2	J	49.9	15.0	mg/Kg			09/28/22 09:31	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	21.1	J	49.9	15.0	mg/Kg		09/26/22 13:43	09/27/22 19:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		09/26/22 13:43	09/27/22 19:54	1
Oil Range Organics (Over C28-C36)	16.1	J	49.9	15.0	mg/Kg		09/26/22 13:43	09/27/22 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/26/22 13:43	09/27/22 19:54	1
o-Terphenyl	131	S1+	70 - 130	09/26/22 13:43	09/27/22 19:54	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.3		4.97	0.853	mg/Kg			09/28/22 03:53	1

Client Sample ID: BH20A

Lab Sample ID: 890-3041-2

Date Collected: 09/23/22 10:45

Matrix: Solid

Date Received: 09/23/22 12:38

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000945	J	0.00200	0.000384	mg/Kg		10/04/22 16:09	10/07/22 01:03	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		10/04/22 16:09	10/07/22 01:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		10/04/22 16:09	10/07/22 01:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		10/04/22 16:09	10/07/22 01:03	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		10/04/22 16:09	10/07/22 01:03	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		10/04/22 16:09	10/07/22 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	41	S1-	70 - 130	10/04/22 16:09	10/07/22 01:03	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Client Sample ID: BH20A

Lab Sample ID: 890-3041-2

Date Collected: 09/23/22 10:45

Matrix: Solid

Date Received: 09/23/22 12:38

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	0.4	S1-	70 - 130	10/04/22 16:09	10/07/22 01:03	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	0.00101	mg/Kg	-		10/07/22 10:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.5		49.9	15.0	mg/Kg	-		09/28/22 09:31	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	23.9	J	49.9	15.0	mg/Kg	-	09/26/22 13:43	09/27/22 20:15	1
Diesel Range Organics (Over C10-C28)	31.6	J B	49.9	15.0	mg/Kg	-	09/26/22 13:43	09/27/22 20:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg	-	09/26/22 13:43	09/27/22 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/26/22 13:43	09/27/22 20:15	1
o-Terphenyl	105		70 - 130	09/26/22 13:43	09/27/22 20:15	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.3		4.95	0.850	mg/Kg	-		09/28/22 03:58	1

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3041-1	BH03A	50 S1-	81
890-3041-2	BH20A	41 S1-	0.4 S1-
LCS 880-36073/1-A	Lab Control Sample	91	100
LCSD 880-36073/2-A	Lab Control Sample Dup	85	94
MB 880-36073/5-A	Method Blank	98	85
MB 880-36203/5-A	Method Blank	97	82
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3041-1	BH03A	111	131 S1+
890-3041-2	BH20A	89	105
LCS 880-35419/2-A	Lab Control Sample	101	109
LCSD 880-35419/3-A	Lab Control Sample Dup	114	127
MB 880-35419/1-A	Method Blank	95	105
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36073/5-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		10/04/22 16:09	10/06/22 21:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/04/22 16:09	10/06/22 21:35	1
1,4-Difluorobenzene (Surr)	85		70 - 130	10/04/22 16:09	10/06/22 21:35	1

Lab Sample ID: LCS 880-36073/1-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09262		mg/Kg		93	70 - 130
Toluene	0.100	0.09281		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08488		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1805		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09406		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-36073/2-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36073

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1015		mg/Kg		102	70 - 130	9	35
Toluene	0.100	0.1014		mg/Kg		101	70 - 130	9	35
Ethylbenzene	0.100	0.09329		mg/Kg		93	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1918		mg/Kg		96	70 - 130	6	35
o-Xylene	0.100	0.09782		mg/Kg		98	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: MB 880-36203/5-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		10/05/22 16:37	10/06/22 10:14	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		10/05/22 16:37	10/06/22 10:14	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

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

Lab Sample ID: MB 880-36203/5-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		10/05/22 16:37	10/06/22 10:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		10/05/22 16:37	10/06/22 10:14	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		10/05/22 16:37	10/06/22 10:14	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		10/05/22 16:37	10/06/22 10:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	10/05/22 16:37	10/06/22 10:14	1
1,4-Difluorobenzene (Surr)	82		70 - 130	10/05/22 16:37	10/06/22 10:14	1

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

Lab Sample ID: MB 880-35419/1-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		09/26/22 13:43	09/27/22 11:23	1
Diesel Range Organics (Over C10-C28)	20.62	J	50.0	15.0	mg/Kg		09/26/22 13:43	09/27/22 11:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/26/22 13:43	09/27/22 11:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/26/22 13:43	09/27/22 11:23	1
o-Terphenyl	105		70 - 130	09/26/22 13:43	09/27/22 11:23	1

Lab Sample ID: LCS 880-35419/2-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	870.5		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	909.2		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-35419/3-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	897.3		mg/Kg		90	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1059		mg/Kg		106	70 - 130	15	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-35419/3-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35419

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	127		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35376/1-A

Matrix: Solid

Analysis Batch: 35521

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	0.858	mg/Kg			09/28/22 01:37		1

Lab Sample ID: LCS 880-35376/2-A

Matrix: Solid

Analysis Batch: 35521

Client Sample ID: Lab Control Sample

Prep Type: Soluble

		Spike	LCS	LCS				%Rec		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride		250	241.3		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-35376/3-A

Matrix: Solid

Analysis Batch: 35521

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	242.1		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

GC VOA

Prep Batch: 36073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	5035	
890-3041-2	BH20A	Total/NA	Solid	5035	
MB 880-36073/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36073/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36073/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 36203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36203/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 36225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	8021B	36073
890-3041-2	BH20A	Total/NA	Solid	8021B	36073
MB 880-36073/5-A	Method Blank	Total/NA	Solid	8021B	36073
MB 880-36203/5-A	Method Blank	Total/NA	Solid	8021B	36203
LCS 880-36073/1-A	Lab Control Sample	Total/NA	Solid	8021B	36073
LCSD 880-36073/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36073

Analysis Batch: 36370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	Total BTEX	
890-3041-2	BH20A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 35419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	8015NM Prep	
890-3041-2	BH20A	Total/NA	Solid	8015NM Prep	
MB 880-35419/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35419/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35419/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	8015B NM	35419
890-3041-2	BH20A	Total/NA	Solid	8015B NM	35419
MB 880-35419/1-A	Method Blank	Total/NA	Solid	8015B NM	35419
LCS 880-35419/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35419
LCSD 880-35419/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35419

Analysis Batch: 35567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Total/NA	Solid	8015 NM	
890-3041-2	BH20A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

HPLC/IC (Continued)

Leach Batch: 35376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-2	BH20A	Soluble	Solid	DI Leach	
MB 880-35376/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35376/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35376/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 35521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3041-1	BH03A	Soluble	Solid	300.0	35376
890-3041-2	BH20A	Soluble	Solid	300.0	35376
MB 880-35376/1-A	Method Blank	Soluble	Solid	300.0	35376
LCS 880-35376/2-A	Lab Control Sample	Soluble	Solid	300.0	35376
LCSD 880-35376/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35376

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Client Sample ID: BH03A

Date Collected: 09/23/22 10:30

Date Received: 09/23/22 12:38

Lab Sample ID: 890-3041-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	36073	10/04/22 16:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36225	10/07/22 00:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36370	10/07/22 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35567	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35419	09/26/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/27/22 19:54	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	35376	09/26/22 10:30	SMC	EET MID
Soluble	Analysis	300.0		1			35521	09/28/22 03:53	CH	EET MID

Client Sample ID: BH20A

Date Collected: 09/23/22 10:45

Date Received: 09/23/22 12:38

Lab Sample ID: 890-3041-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	36073	10/04/22 16:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36225	10/07/22 01:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36370	10/07/22 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35567	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35419	09/26/22 13:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/27/22 20:15	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	35376	09/26/22 10:30	SMC	EET MID
Soluble	Analysis	300.0		1			35521	09/28/22 03:58	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

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

Method Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

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

Eurofins Carlsbad

Sample Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 890-3041-1
SDG: 12594900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3041-1	BH03A	Solid	09/23/22 10:30	09/23/22 12:38	5
890-3041-2	BH20A	Solid	09/23/22 10:45	09/23/22 12:38	3

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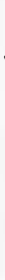
Chain of Custody

www.xenco.com Page ____ of ____

Work Order Comments				
Program:	UST/PST ☐	PRF ☐	Brownfields ☐	RRD ☐ Superfund ☐
State of Project:				
Reporting:	Level II ☐	Level III ☐	PST/UST ☐	TRRF ☐ Level I ☐
Deliverables:	EDD ☐	ADAPT ☐	Other:	

[illegible]

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins 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 Eurofins Xenco. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Repassed by. Liam Griesole RT  0923322 1237 Ver 44 +2323 1229

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3041-1

SDG Number: 12594900

Login Number: 3041**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.	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	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3041-1

SDG Number: 12594900

Login Number: 3041**List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 09/26/22 09:09 AM**

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	



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 880-20658-1
Laboratory Sample Delivery Group: 12594900
Client Project/Site: Outland Booster

For:
GHD Services Inc.
11200 Richmond Ave
Suite 200
Houston, Texas 77082

Attn: Stephen Asante-Ansong

A handwritten signature in black ink that reads "Debbie Simmons".

Authorized for release by:
10/26/2022 4:19:32 PM

Debbie Simmons, Project Manager
(832)986-6768
Debbie.Simmons@et.eurofinsus.com

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

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

Client: GHD Services Inc.
Project/Site: Outland Booster

Laboratory Job ID: 880-20658-1
SDG: 12594900

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.

HPLC/IC

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
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

Eurofins Midland

Case Narrative

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Job ID: 880-20658-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-20658-1

Comments

No additional comments.

Receipt

The samples were received on 10/24/2022 10:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.4° C.

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH28A (880-20658-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-37616 recovered above the upper control limit for m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-37616/51).

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-37766 recovered above the upper control limit for Benzene and Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-37766 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-37766/33).

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

GC Semi VOA

Method 8015B NM: The method blank for preparation batch 880-37642 and analytical batch 880-37607 contained Gasoline Range Organics (GRO)-C6-C10 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 8015B NM: The surrogate recovery for the blank associated with preparation batch 880-37683 and analytical batch 880-37760 was outside the upper control limits.

Method 8015B NM: The method blank for preparation batch 880-37683 and analytical batch 880-37760 contained Diesel Range Organics (Over C10-C28) 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 8015B NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-37683 and analytical batch 880-37760 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (880-20658-A-26-I MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B NM: The method blank for preparation batch 880-37677 and analytical batch 880-37758 contained Diesel Range Organics (Over C10-C28) 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.

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

General Chemistry

Method 300.0: The laboratory control sample (LCS) associated with preparation batch 880-37781 and analytical batch 880-37823 was

Case Narrative

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Job ID: 880-20658-1 (Continued)

Laboratory: Eurofins Midland (Continued)

outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

Organic Prep

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

VOA Prep

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

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH27A

Lab Sample ID: 880-20658-1

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/24/22 12:38	10/24/22 21:54	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		10/24/22 12:38	10/24/22 21:54	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		10/24/22 12:38	10/24/22 21:54	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		10/24/22 12:38	10/24/22 21:54	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		10/24/22 12:38	10/24/22 21:54	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		10/24/22 12:38	10/24/22 21:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	10/24/22 12:38	10/24/22 21:54	1
1,4-Difluorobenzene (Surr)	88		70 - 130	10/24/22 12:38	10/24/22 21:54	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<14.9	U	49.8	14.9	mg/Kg			10/26/22 11:24	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	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 11:36	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 11:36	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	10/24/22 13:10	10/25/22 11:36	1
o-Terphenyl	95		70 - 130	10/24/22 13:10	10/25/22 11:36	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		4.99	0.394	mg/Kg			10/25/22 00:02	1

Client Sample ID: BH28A

Lab Sample ID: 880-20658-2

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00396		0.00199	0.000383	mg/Kg		10/24/22 12:38	10/24/22 22:14	1
Toluene	0.00192	J	0.00199	0.000454	mg/Kg		10/24/22 12:38	10/24/22 22:14	1
Ethylbenzene	0.000929	J	0.00199	0.000563	mg/Kg		10/24/22 12:38	10/24/22 22:14	1
m-Xylene & p-Xylene	0.00761		0.00398	0.00101	mg/Kg		10/24/22 12:38	10/24/22 22:14	1
o-Xylene	0.00747		0.00199	0.000343	mg/Kg		10/24/22 12:38	10/24/22 22:14	1
Xylenes, Total	0.0151		0.00398	0.00101	mg/Kg		10/24/22 12:38	10/24/22 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	53	S1-	70 - 130	10/24/22 12:38	10/24/22 22:14	1
1,4-Difluorobenzene (Surr)	95		70 - 130	10/24/22 12:38	10/24/22 22:14	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH28A

Lab Sample ID: 880-20658-2

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0219		0.00398	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 12:41	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 12:41	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 12:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				10/24/22 13:10	10/25/22 12:41	1
o-Terphenyl	91		70 - 130				10/24/22 13:10	10/25/22 12:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.2		5.05	0.399	mg/Kg			10/25/22 00:17	1

Client Sample ID: BH29A

Lab Sample ID: 880-20658-3

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:38	10/24/22 22:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				10/24/22 12:38	10/24/22 22:35	1
1,4-Difluorobenzene (Surr)	98		70 - 130				10/24/22 12:38	10/24/22 22:35	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<14.9	U	49.8	14.9	mg/Kg			10/26/22 11:24	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	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 13:02	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 13:02	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH29A

Lab Sample ID: 880-20658-3

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 13:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				10/24/22 13:10	10/25/22 13:02	1
o-Terphenyl	89		70 - 130				10/24/22 13:10	10/25/22 13:02	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		5.00	0.395	mg/Kg			10/25/22 00:21	1

Client Sample ID: BH30A

Lab Sample ID: 880-20658-4

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/24/22 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				10/24/22 12:38	10/24/22 22:55	1
1,4-Difluorobenzene (Surr)	95		70 - 130				10/24/22 12:38	10/24/22 22:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:24	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:24	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				10/24/22 13:10	10/25/22 13:24	1
o-Terphenyl	85		70 - 130				10/24/22 13:10	10/25/22 13:24	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		4.98	0.393	mg/Kg			10/25/22 00:26	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH31A

Lab Sample ID: 880-20658-5

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		10/24/22 12:38	10/24/22 23:16	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		10/24/22 12:38	10/24/22 23:16	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		10/24/22 12:38	10/24/22 23:16	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		10/24/22 12:38	10/24/22 23:16	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		10/24/22 12:38	10/24/22 23:16	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		10/24/22 12:38	10/24/22 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/24/22 12:38	10/24/22 23:16	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/24/22 12:38	10/24/22 23:16	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.1	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	16.1	J	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:45	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:45	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	10/24/22 13:10	10/25/22 13:45	1
o-Terphenyl	99		70 - 130	10/24/22 13:10	10/25/22 13:45	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		4.95	0.391	mg/Kg			10/25/22 00:31	1

Client Sample ID: BH32A

Lab Sample ID: 880-20658-6

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/24/22 12:38	10/24/22 23:36	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/24/22 12:38	10/24/22 23:36	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/24/22 12:38	10/24/22 23:36	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/24/22 23:36	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/24/22 12:38	10/24/22 23:36	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/24/22 23:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/24/22 12:38	10/24/22 23:36	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/24/22 12:38	10/24/22 23:36	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH32A

Lab Sample ID: 880-20658-6

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 14:07	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 14:07	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				10/24/22 13:10	10/25/22 14:07	1
o-Terphenyl	90		70 - 130				10/24/22 13:10	10/25/22 14:07	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.4		5.02	0.397	mg/Kg			10/25/22 00:46	1

Client Sample ID: BH33A

Lab Sample ID: 880-20658-7

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/24/22 23:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				10/24/22 12:38	10/24/22 23:57	1
1,4-Difluorobenzene (Surr)	93		70 - 130				10/24/22 12:38	10/24/22 23:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 14:28	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 14:28	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH33A

Lab Sample ID: 880-20658-7

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg	-	10/24/22 13:10	10/25/22 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				10/24/22 13:10	10/25/22 14:28	1
o-Terphenyl	97		70 - 130				10/24/22 13:10	10/25/22 14:28	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.6		4.97	0.393	mg/Kg	-		10/25/22 00:51	1

Client Sample ID: BH34

Lab Sample ID: 880-20658-8

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg	-	10/24/22 12:38	10/25/22 00:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				10/24/22 12:38	10/25/22 00:17	1
1,4-Difluorobenzene (Surr)	85		70 - 130				10/24/22 12:38	10/25/22 00:17	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg	-		10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg	-		10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg	-	10/24/22 13:10	10/25/22 14:50	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg	-	10/24/22 13:10	10/25/22 14:50	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg	-	10/24/22 13:10	10/25/22 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				10/24/22 13:10	10/25/22 14:50	1
o-Terphenyl	86		70 - 130				10/24/22 13:10	10/25/22 14:50	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		4.95	0.391	mg/Kg	-		10/25/22 00:55	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH35

Lab Sample ID: 880-20658-9

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/24/22 12:38	10/25/22 00:38	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		10/24/22 12:38	10/25/22 00:38	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		10/24/22 12:38	10/25/22 00:38	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		10/24/22 12:38	10/25/22 00:38	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		10/24/22 12:38	10/25/22 00:38	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		10/24/22 12:38	10/25/22 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/24/22 12:38	10/25/22 00:38	1
1,4-Difluorobenzene (Surr)	89		70 - 130	10/24/22 12:38	10/25/22 00:38	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:11	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	10/24/22 13:10	10/25/22 15:11	1
o-Terphenyl	88		70 - 130	10/24/22 13:10	10/25/22 15:11	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.0		4.96	0.392	mg/Kg			10/25/22 01:00	1

Client Sample ID: BH36

Lab Sample ID: 880-20658-10

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		10/24/22 12:38	10/25/22 00:58	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		10/24/22 12:38	10/25/22 00:58	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		10/24/22 12:38	10/25/22 00:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		10/24/22 12:38	10/25/22 00:58	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		10/24/22 12:38	10/25/22 00:58	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		10/24/22 12:38	10/25/22 00:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/24/22 12:38	10/25/22 00:58	1
1,4-Difluorobenzene (Surr)	87		70 - 130	10/24/22 12:38	10/25/22 00:58	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH36

Lab Sample ID: 880-20658-10

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:32	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:32	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				10/24/22 13:10	10/25/22 15:32	1
o-Terphenyl	83		70 - 130				10/24/22 13:10	10/25/22 15:32	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.2		5.00	0.395	mg/Kg			10/25/22 01:05	1

Client Sample ID: SW1A

Lab Sample ID: 880-20658-11

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/25/22 02:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/24/22 12:38	10/25/22 02:20	1
1,4-Difluorobenzene (Surr)	98		70 - 130				10/24/22 12:38	10/25/22 02:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	20.8	J	50.0	15.0	mg/Kg			10/26/22 11:24	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	20.8	J	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:15	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:15	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW1A

Lab Sample ID: 880-20658-11

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/24/22 13:10	10/25/22 16:15	1
o-Terphenyl	93		70 - 130				10/24/22 13:10	10/25/22 16:15	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.3		4.95	0.391	mg/Kg			10/25/22 01:10	1

Client Sample ID: SW3A

Lab Sample ID: 880-20658-12

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/25/22 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				10/24/22 12:38	10/25/22 02:41	1
1,4-Difluorobenzene (Surr)	88		70 - 130				10/24/22 12:38	10/25/22 02:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:37	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:37	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				10/24/22 13:10	10/25/22 16:37	1
o-Terphenyl	85		70 - 130				10/24/22 13:10	10/25/22 16:37	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.5		4.99	0.394	mg/Kg			10/25/22 01:24	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW4

Lab Sample ID: 880-20658-13

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		10/24/22 12:38	10/25/22 03:01	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		10/24/22 12:38	10/25/22 03:01	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		10/24/22 12:38	10/25/22 03:01	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		10/24/22 12:38	10/25/22 03:01	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		10/24/22 12:38	10/25/22 03:01	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		10/24/22 12:38	10/25/22 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/24/22 12:38	10/25/22 03:01	1
1,4-Difluorobenzene (Surr)	70		70 - 130	10/24/22 12:38	10/25/22 03:01	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00401	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:58	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:58	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	10/24/22 13:10	10/25/22 16:58	1
o-Terphenyl	87		70 - 130	10/24/22 13:10	10/25/22 16:58	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.0		4.96	0.392	mg/Kg			10/25/22 01:29	1

Client Sample ID: SW5

Lab Sample ID: 880-20658-14

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389	mg/Kg		10/24/22 12:38	10/25/22 03:22	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		10/24/22 12:38	10/25/22 03:22	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		10/24/22 12:38	10/25/22 03:22	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		10/24/22 12:38	10/25/22 03:22	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		10/24/22 12:38	10/25/22 03:22	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		10/24/22 12:38	10/25/22 03:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	10/24/22 12:38	10/25/22 03:22	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/24/22 12:38	10/25/22 03:22	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW5

Lab Sample ID: 880-20658-14

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00404	0.00102	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:20	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:20	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				10/24/22 13:10	10/25/22 17:20	1
o-Terphenyl	86		70 - 130				10/24/22 13:10	10/25/22 17:20	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.8		5.00	0.395	mg/Kg			10/25/22 01:44	1

Client Sample ID: SW6

Lab Sample ID: 880-20658-15

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:38	10/25/22 03:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/24/22 12:38	10/25/22 03:42	1
1,4-Difluorobenzene (Surr)	90		70 - 130				10/24/22 12:38	10/25/22 03:42	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:41	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:41	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW6

Lab Sample ID: 880-20658-15

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				10/24/22 13:10	10/25/22 17:41	1
o-Terphenyl	85		70 - 130				10/24/22 13:10	10/25/22 17:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.2		5.05	0.399	mg/Kg			10/25/22 01:49	1

Client Sample ID: SW7

Lab Sample ID: 880-20658-16

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:38	10/25/22 04:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				10/24/22 12:38	10/25/22 04:02	1
1,4-Difluorobenzene (Surr)	81		70 - 130				10/24/22 12:38	10/25/22 04:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:02	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:02	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				10/24/22 13:10	10/25/22 18:02	1
o-Terphenyl	84		70 - 130				10/24/22 13:10	10/25/22 18:02	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.5		5.02	0.397	mg/Kg			10/25/22 01:54	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW8

Lab Sample ID: 880-20658-17

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/24/22 12:38	10/25/22 04:23	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		10/24/22 12:38	10/25/22 04:23	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		10/24/22 12:38	10/25/22 04:23	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		10/24/22 12:38	10/25/22 04:23	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		10/24/22 12:38	10/25/22 04:23	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		10/24/22 12:38	10/25/22 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/24/22 12:38	10/25/22 04:23	1
1,4-Difluorobenzene (Surr)	72		70 - 130	10/24/22 12:38	10/25/22 04:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:24	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:24	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	10/24/22 13:10	10/25/22 18:24	1
o-Terphenyl	82		70 - 130	10/24/22 13:10	10/25/22 18:24	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		4.98	0.393	mg/Kg			10/25/22 01:58	1

Client Sample ID: SW9

Lab Sample ID: 880-20658-18

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		10/24/22 12:38	10/25/22 04:43	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		10/24/22 12:38	10/25/22 04:43	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		10/24/22 12:38	10/25/22 04:43	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		10/24/22 12:38	10/25/22 04:43	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		10/24/22 12:38	10/25/22 04:43	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		10/24/22 12:38	10/25/22 04:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/24/22 12:38	10/25/22 04:43	1
1,4-Difluorobenzene (Surr)	97		70 - 130	10/24/22 12:38	10/25/22 04:43	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW9

Lab Sample ID: 880-20658-18

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<14.9	U	49.8	14.9	mg/Kg			10/26/22 11:24	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	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 18:45	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 18:45	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		10/24/22 13:10	10/25/22 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				10/24/22 13:10	10/25/22 18:45	1
o-Terphenyl	98		70 - 130				10/24/22 13:10	10/25/22 18:45	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.95	0.391	mg/Kg			10/25/22 02:03	1

Client Sample ID: SW10

Lab Sample ID: 880-20658-19

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000829	J	0.00200	0.000385	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
Toluene	0.000592	J	0.00200	0.000456	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
Ethylbenzene	0.00190	J	0.00200	0.000565	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:38	10/25/22 05:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130				10/24/22 12:38	10/25/22 05:04	1
1,4-Difluorobenzene (Surr)	124		70 - 130				10/24/22 12:38	10/25/22 05:04	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00332	J	0.00400	0.00101	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:07	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:07	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW10

Lab Sample ID: 880-20658-19

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				10/24/22 13:10	10/25/22 19:07	1
o-Terphenyl	83		70 - 130				10/24/22 13:10	10/25/22 19:07	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.1		5.00	0.395	mg/Kg			10/25/22 02:08	1

Client Sample ID: SW11

Lab Sample ID: 880-20658-20

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:38	10/25/22 05:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				10/24/22 12:38	10/25/22 05:24	1
1,4-Difluorobenzene (Surr)	83		70 - 130				10/24/22 12:38	10/25/22 05:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 12:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:28	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:28	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 13:10	10/25/22 19:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				10/24/22 13:10	10/25/22 19:28	1
o-Terphenyl	82		70 - 130				10/24/22 13:10	10/25/22 19:28	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.9		4.97	0.393	mg/Kg			10/25/22 02:13	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW12

Lab Sample ID: 880-20658-21

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:42	10/25/22 16:11	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/24/22 12:42	10/25/22 16:11	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/24/22 12:42	10/25/22 16:11	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:42	10/25/22 16:11	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/24/22 12:42	10/25/22 16:11	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:42	10/25/22 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	10/24/22 12:42	10/25/22 16:11	1
1,4-Difluorobenzene (Surr)	94		70 - 130	10/24/22 12:42	10/25/22 16:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	32.2	J	50.0	15.0	mg/Kg			10/26/22 11:03	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 19:07	1
Diesel Range Organics (Over C10-C28)	32.2	J B *1	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 19:07	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	10/24/22 14:09	10/25/22 19:07	1
o-Terphenyl	103		70 - 130	10/24/22 14:09	10/25/22 19:07	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.0		4.95	0.391	mg/Kg			10/24/22 22:44	1

Client Sample ID: SW13

Lab Sample ID: 880-20658-22

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:42	10/25/22 16:37	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/24/22 12:42	10/25/22 16:37	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/24/22 12:42	10/25/22 16:37	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:42	10/25/22 16:37	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/24/22 12:42	10/25/22 16:37	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 12:42	10/25/22 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	10/24/22 12:42	10/25/22 16:37	1
1,4-Difluorobenzene (Surr)	104		70 - 130	10/24/22 12:42	10/25/22 16:37	1

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Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW13

Lab Sample ID: 880-20658-22

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19.3	J	50.0	15.0	mg/Kg			10/25/22 10:41	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	19.3	J	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 04:43	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 04:43	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 04:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				10/24/22 11:10	10/25/22 04:43	1
o-Terphenyl	104		70 - 130				10/24/22 11:10	10/25/22 04:43	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		5.02	0.397	mg/Kg			10/24/22 22:59	1

Client Sample ID: SW14

Lab Sample ID: 880-20658-23

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/24/22 12:42	10/25/22 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				10/24/22 12:42	10/25/22 17:02	1
1,4-Difluorobenzene (Surr)	94		70 - 130				10/24/22 12:42	10/25/22 17:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/26/22 09:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/25/22 10:41	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	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:05	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:05	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW14

Lab Sample ID: 880-20658-23

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				10/24/22 11:10	10/25/22 05:05	1
o-Terphenyl	103		70 - 130				10/24/22 11:10	10/25/22 05:05	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.9		5.04	0.398	mg/Kg			10/24/22 23:04	1

Client Sample ID: SW15

Lab Sample ID: 880-20658-24

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/24/22 12:42	10/25/22 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				10/24/22 12:42	10/25/22 18:46	1
1,4-Difluorobenzene (Surr)	91		70 - 130				10/24/22 12:42	10/25/22 18:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/26/22 09:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	26.3	J	49.9	15.0	mg/Kg			10/25/22 10:41	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	26.3	J	49.9	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 11:10	10/25/22 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				10/24/22 11:10	10/25/22 05:26	1
o-Terphenyl	111		70 - 130				10/24/22 11:10	10/25/22 05:26	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.5		4.97	0.393	mg/Kg			10/24/22 23:18	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW16

Lab Sample ID: 880-20658-25

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/24/22 11:00	10/24/22 22:45	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/24/22 11:00	10/24/22 22:45	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/24/22 11:00	10/24/22 22:45	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 11:00	10/24/22 22:45	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/24/22 11:00	10/24/22 22:45	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/24/22 11:00	10/24/22 22:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	10/24/22 11:00	10/24/22 22:45	1
1,4-Difluorobenzene (Surr)	106		70 - 130	10/24/22 11:00	10/24/22 22:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 12:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40.7	J	49.9	15.0	mg/Kg			10/25/22 09:18	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	23.3	J B	49.9	15.0	mg/Kg		10/24/22 11:14	10/25/22 05:26	1
Diesel Range Organics (Over C10-C28)	17.4	J	49.9	15.0	mg/Kg		10/24/22 11:14	10/25/22 05:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/24/22 11:14	10/25/22 05:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	10/24/22 11:14	10/25/22 05:26	1
o-Terphenyl	108		70 - 130	10/24/22 11:14	10/25/22 05:26	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.6		4.95	0.391	mg/Kg			10/24/22 23:23	1

Client Sample ID: BH1A

Lab Sample ID: 880-20658-26

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/25/22 09:18	10/25/22 11:38	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		10/25/22 09:18	10/25/22 11:38	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		10/25/22 09:18	10/25/22 11:38	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 11:38	1
o-Xylene	0.000364	J	0.00201	0.000346	mg/Kg		10/25/22 09:18	10/25/22 11:38	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	10/25/22 09:18	10/25/22 11:38	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/25/22 09:18	10/25/22 11:38	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH1A

Lab Sample ID: 880-20658-26

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 21:15	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 21:15	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				10/25/22 09:52	10/25/22 21:15	1
o-Terphenyl	90		70 - 130				10/25/22 09:52	10/25/22 21:15	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.3	*-	5.03	0.397	mg/Kg			10/26/22 00:18	1

Client Sample ID: BH4A

Lab Sample ID: 880-20658-27

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 11:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				10/25/22 09:18	10/25/22 11:59	1
1,4-Difluorobenzene (Surr)	70		70 - 130				10/25/22 09:18	10/25/22 11:59	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<14.9	U	49.8	14.9	mg/Kg			10/26/22 11:24	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	<14.9	U	49.8	14.9	mg/Kg		10/25/22 09:52	10/25/22 22:20	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		10/25/22 09:52	10/25/22 22:20	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH4A

Lab Sample ID: 880-20658-27

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		10/25/22 09:52	10/25/22 22:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				10/25/22 09:52	10/25/22 22:20	1
o-Terphenyl	84		70 - 130				10/25/22 09:52	10/25/22 22:20	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.7	*-	4.98	0.393	mg/Kg			10/26/22 00:43	1

Client Sample ID: BH5A

Lab Sample ID: 880-20658-28

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 12:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				10/25/22 09:18	10/25/22 12:19	1
1,4-Difluorobenzene (Surr)	73		70 - 130				10/25/22 09:18	10/25/22 12:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.2	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	16.2	J	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 22:41	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 22:41	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 22:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				10/25/22 09:52	10/25/22 22:41	1
o-Terphenyl	103		70 - 130				10/25/22 09:52	10/25/22 22:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		5.01	0.396	mg/Kg			10/25/22 16:15	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH7A

Lab Sample ID: 880-20658-29

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/25/22 09:18	10/25/22 12:40	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/25/22 09:18	10/25/22 12:40	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/25/22 09:18	10/25/22 12:40	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 12:40	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/25/22 09:18	10/25/22 12:40	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	10/25/22 09:18	10/25/22 12:40	1
1,4-Difluorobenzene (Surr)	73		70 - 130	10/25/22 09:18	10/25/22 12:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:04	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:04	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	10/25/22 09:52	10/25/22 23:04	1
o-Terphenyl	88		70 - 130	10/25/22 09:52	10/25/22 23:04	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.4		4.96	0.392	mg/Kg			10/25/22 16:30	1

Client Sample ID: BH8A

Lab Sample ID: 880-20658-30

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/25/22 09:18	10/25/22 13:00	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		10/25/22 09:18	10/25/22 13:00	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		10/25/22 09:18	10/25/22 13:00	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 13:00	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		10/25/22 09:18	10/25/22 13:00	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	10/25/22 09:18	10/25/22 13:00	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/25/22 09:18	10/25/22 13:00	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH8A

Lab Sample ID: 880-20658-30

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:25	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:25	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				10/25/22 09:52	10/25/22 23:25	1
o-Terphenyl	81		70 - 130				10/25/22 09:52	10/25/22 23:25	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.0		5.01	0.396	mg/Kg			10/25/22 16:35	1

Client Sample ID: BH9A

Lab Sample ID: 880-20658-31

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 13:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				10/25/22 09:18	10/25/22 13:21	1
1,4-Difluorobenzene (Surr)	75		70 - 130				10/25/22 09:18	10/25/22 13:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:47	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH9A

Lab Sample ID: 880-20658-31

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 23:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				10/25/22 09:52	10/25/22 23:47	1
o-Terphenyl	79		70 - 130				10/25/22 09:52	10/25/22 23:47	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.5		5.00	0.395	mg/Kg			10/25/22 16:40	1

Client Sample ID: BH10A

Lab Sample ID: 880-20658-32

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				10/25/22 09:18	10/25/22 13:41	1
1,4-Difluorobenzene (Surr)	91		70 - 130				10/25/22 09:18	10/25/22 13:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	22.4	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	22.4	J	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:09	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:09	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				10/25/22 09:52	10/26/22 00:09	1
o-Terphenyl	94		70 - 130				10/25/22 09:52	10/26/22 00:09	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.0		5.05	0.399	mg/Kg			10/25/22 16:45	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH14A

Lab Sample ID: 880-20658-33

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/25/22 09:18	10/25/22 14:02	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		10/25/22 09:18	10/25/22 14:02	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/25/22 09:18	10/25/22 14:02	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 14:02	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/25/22 09:18	10/25/22 14:02	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	10/25/22 09:18	10/25/22 14:02	1
1,4-Difluorobenzene (Surr)	85		70 - 130	10/25/22 09:18	10/25/22 14:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/25/22 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:31	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:31	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	10/25/22 09:52	10/26/22 00:31	1
o-Terphenyl	81		70 - 130	10/25/22 09:52	10/26/22 00:31	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		4.98	0.393	mg/Kg			10/25/22 16:59	1

Client Sample ID: BH15A

Lab Sample ID: 880-20658-34

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 16:42	1
Toluene	0.000659	J	0.00199	0.000454	mg/Kg		10/25/22 09:18	10/25/22 16:42	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/25/22 09:18	10/25/22 16:42	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 16:42	1
o-Xylene	0.000602	J	0.00199	0.000343	mg/Kg		10/25/22 09:18	10/25/22 16:42	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	10/25/22 09:18	10/25/22 16:42	1
1,4-Difluorobenzene (Surr)	91		70 - 130	10/25/22 09:18	10/25/22 16:42	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH15A

Lab Sample ID: 880-20658-34

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00126	J	0.00398	0.00101	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	26.0	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	26.0	J	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:52	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:52	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 00:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				10/25/22 09:52	10/26/22 00:52	1
o-Terphenyl	96		70 - 130				10/25/22 09:52	10/26/22 00:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		5.01	0.396	mg/Kg			10/25/22 17:04	1

Client Sample ID: BH16A

Lab Sample ID: 880-20658-35

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
Toluene	0.000557	J	0.00199	0.000453	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				10/25/22 09:18	10/25/22 17:02	1
1,4-Difluorobenzene (Surr)	91		70 - 130				10/25/22 09:18	10/25/22 17:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	16.0	J	50.0	15.0	mg/Kg			10/26/22 11:24	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	16.0	J	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 01:14	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 01:14	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH16A

Lab Sample ID: 880-20658-35

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg	-	10/25/22 09:52	10/26/22 01:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				10/25/22 09:52	10/26/22 01:14	1
o-Terphenyl	85		70 - 130				10/25/22 09:52	10/26/22 01:14	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.6		5.02	0.397	mg/Kg	-		10/25/22 17:09	1

Client Sample ID: BH18A

Lab Sample ID: 880-20658-36

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg	-	10/25/22 09:18	10/25/22 17:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/25/22 09:18	10/25/22 17:23	1
1,4-Difluorobenzene (Surr)	93		70 - 130				10/25/22 09:18	10/25/22 17:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg	-		10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg	-		10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg	-	10/25/22 09:52	10/26/22 01:58	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg	-	10/25/22 09:52	10/26/22 01:58	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg	-	10/25/22 09:52	10/26/22 01:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				10/25/22 09:52	10/26/22 01:58	1
o-Terphenyl	80		70 - 130				10/25/22 09:52	10/26/22 01:58	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.9		4.99	0.394	mg/Kg	-		10/25/22 17:14	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH19A

Lab Sample ID: 880-20658-37

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/25/22 09:18	10/25/22 17:43	1
Toluene	0.000479	J	0.00200	0.000455	mg/Kg		10/25/22 09:18	10/25/22 17:43	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/25/22 09:18	10/25/22 17:43	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 17:43	1
o-Xylene	0.000605	J	0.00200	0.000343	mg/Kg		10/25/22 09:18	10/25/22 17:43	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	10/25/22 09:18	10/25/22 17:43	1
1,4-Difluorobenzene (Surr)	86		70 - 130	10/25/22 09:18	10/25/22 17:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00108	J	0.00399	0.00101	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:19	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:19	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	10/25/22 09:52	10/26/22 02:19	1
o-Terphenyl	84		70 - 130	10/25/22 09:52	10/26/22 02:19	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.7		4.96	0.392	mg/Kg			10/25/22 17:19	1

Client Sample ID: BH21A

Lab Sample ID: 880-20658-38

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 18:04	1
Toluene	0.000469	J	0.00199	0.000453	mg/Kg		10/25/22 09:18	10/25/22 18:04	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/25/22 09:18	10/25/22 18:04	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 18:04	1
o-Xylene	0.000481	J	0.00199	0.000342	mg/Kg		10/25/22 09:18	10/25/22 18:04	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	10/25/22 09:18	10/25/22 18:04	1
1,4-Difluorobenzene (Surr)	89		70 - 130	10/25/22 09:18	10/25/22 18:04	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH21A

Lab Sample ID: 880-20658-38

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:41	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:41	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				10/25/22 09:52	10/26/22 02:41	1
o-Terphenyl	83		70 - 130				10/25/22 09:52	10/26/22 02:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.6		5.05	0.399	mg/Kg			10/25/22 17:23	1

Client Sample ID: BH22A

Lab Sample ID: 880-20658-39

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
Toluene	0.000580	J	0.00200	0.000455	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		10/25/22 09:18	10/25/22 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				10/25/22 09:18	10/25/22 18:24	1
1,4-Difluorobenzene (Surr)	94		70 - 130				10/25/22 09:18	10/25/22 18:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	50.0	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:03	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:03	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH22A

Lab Sample ID: 880-20658-39

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				10/25/22 09:52	10/26/22 03:03	1
o-Terphenyl	87		70 - 130				10/25/22 09:52	10/26/22 03:03	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.2		5.01	0.396	mg/Kg			10/25/22 17:38	1

Client Sample ID: BH23A

Lab Sample ID: 880-20658-40

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
Toluene	0.000486	J	0.00199	0.000454	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		10/25/22 09:18	10/25/22 18:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				10/25/22 09:18	10/25/22 18:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130				10/25/22 09:18	10/25/22 18:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	26.9	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	26.9	J	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:25	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:25	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				10/25/22 09:52	10/26/22 03:25	1
o-Terphenyl	96		70 - 130				10/25/22 09:52	10/26/22 03:25	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.1		5.02	0.397	mg/Kg			10/25/22 17:43	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH24A

Lab Sample ID: 880-20658-41

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		10/25/22 09:18	10/25/22 19:05	1
Toluene	0.00166	J	0.00199	0.000453	mg/Kg		10/25/22 09:18	10/25/22 19:05	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		10/25/22 09:18	10/25/22 19:05	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 19:05	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		10/25/22 09:18	10/25/22 19:05	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		10/25/22 09:18	10/25/22 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	10/25/22 09:18	10/25/22 19:05	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/25/22 09:18	10/25/22 19:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00166	J	0.00398	0.00100	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	28.9	J	50.0	15.0	mg/Kg			10/26/22 11:24	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	28.9	J	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:47	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/26/22 03:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	10/25/22 09:52	10/26/22 03:47	1
o-Terphenyl	99		70 - 130	10/25/22 09:52	10/26/22 03:47	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.3		5.05	0.399	mg/Kg			10/25/22 17:57	1

Client Sample ID: BH25A

Lab Sample ID: 880-20658-42

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		10/25/22 09:18	10/25/22 19:25	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		10/25/22 09:18	10/25/22 19:25	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		10/25/22 09:18	10/25/22 19:25	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		10/25/22 09:18	10/25/22 19:25	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		10/25/22 09:18	10/25/22 19:25	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		10/25/22 09:18	10/25/22 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/25/22 09:18	10/25/22 19:25	1
1,4-Difluorobenzene (Surr)	72		70 - 130	10/25/22 09:18	10/25/22 19:25	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH25A

Lab Sample ID: 880-20658-42

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19.8	J	49.9	15.0	mg/Kg			10/26/22 11:24	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	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 04:08	1
Diesel Range Organics (Over C10-C28)	19.8	J	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 04:08	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		10/25/22 09:52	10/26/22 04:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				10/25/22 09:52	10/26/22 04:08	1
o-Terphenyl	91		70 - 130				10/25/22 09:52	10/26/22 04:08	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.9		4.98	0.393	mg/Kg			10/25/22 18:02	1

Client Sample ID: BH26A

Lab Sample ID: 880-20658-43

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		10/25/22 09:18	10/25/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				10/25/22 09:18	10/25/22 19:46	1
1,4-Difluorobenzene (Surr)	74		70 - 130				10/25/22 09:18	10/25/22 19:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg			10/26/22 09:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	29.2	J	49.8	14.9	mg/Kg			10/26/22 11:24	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	<14.9	U	49.8	14.9	mg/Kg		10/25/22 09:52	10/26/22 04:30	1
Diesel Range Organics (Over C10-C28)	29.2	J	49.8	14.9	mg/Kg		10/25/22 09:52	10/26/22 04:30	1

Eurofins Midland

Client Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH26A

Lab Sample ID: 880-20658-43

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg	-	10/25/22 09:52	10/26/22 04:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	10/25/22 09:52	10/26/22 04:30	1
o-Terphenyl	84		70 - 130	10/25/22 09:52	10/26/22 04:30	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.1		4.96	0.392	mg/Kg	-		10/25/22 18:07	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-20658-1	BH27A	100	88
880-20658-1 MS	BH27A	127	100
880-20658-1 MSD	BH27A	119	101
880-20658-2	BH28A	53 S1-	95
880-20658-3	BH29A	98	98
880-20658-4	BH30A	93	95
880-20658-5	BH31A	98	80
880-20658-6	BH32A	113	80
880-20658-7	BH33A	98	93
880-20658-8	BH34	94	85
880-20658-9	BH35	99	89
880-20658-10	BH36	99	87
880-20658-11	SW1A	97	98
880-20658-12	SW3A	98	88
880-20658-13	SW4	87	70
880-20658-14	SW5	117	81
880-20658-15	SW6	97	90
880-20658-16	SW7	119	81
880-20658-17	SW8	87	72
880-20658-18	SW9	98	97
880-20658-19	SW10	81	124
880-20658-20	SW11	118	83
880-20658-21	SW12	106	94
880-20658-22	SW13	91	104
880-20658-23	SW14	127	94
880-20658-24	SW15	123	91
880-20658-25	SW16	119	106
880-20658-26	BH1A	105	91
880-20658-26 MS	BH1A	118	105
880-20658-26 MSD	BH1A	125	104
880-20658-27	BH4A	102	70
880-20658-28	BH5A	95	73
880-20658-29	BH7A	97	73
880-20658-30	BH8A	95	91
880-20658-31	BH9A	86	75
880-20658-32	BH10A	96	91
880-20658-33	BH14A	92	85
880-20658-34	BH15A	102	91
880-20658-35	BH16A	95	91
880-20658-36	BH18A	97	93
880-20658-37	BH19A	91	86
880-20658-38	BH21A	100	89
880-20658-39	BH22A	97	94
880-20658-40	BH23A	105	96
880-20658-41	BH24A	100	96
880-20658-42	BH25A	88	72
880-20658-43	BH26A	87	74
LCS 880-37637/1-A	Lab Control Sample	117	100
LCS 880-37669/1-A	Lab Control Sample	89	108

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
LCS 880-37670/1-A	Lab Control Sample	116	108
LCS 880-37771/1-A	Lab Control Sample	117	96
LCSD 880-37637/2-A	Lab Control Sample Dup	112	101
LCSD 880-37669/2-A	Lab Control Sample Dup	118	101
LCSD 880-37670/2-A	Lab Control Sample Dup	119	107
LCSD 880-37771/2-A	Lab Control Sample Dup	114	107
MB 880-37622/5-A	Method Blank	87	93
MB 880-37637/5-A	Method Blank	70	96
MB 880-37669/5-A	Method Blank	84	93
MB 880-37670/5-A	Method Blank	77	101
MB 880-37771/5-A	Method Blank	88	93
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-20658-1	BH27A	91	95
880-20658-1 MS	BH27A	98	81
880-20658-1 MSD	BH27A	79	75
880-20658-2	BH28A	91	91
880-20658-3	BH29A	88	89
880-20658-4	BH30A	89	85
880-20658-5	BH31A	100	99
880-20658-6	BH32A	91	90
880-20658-7	BH33A	102	97
880-20658-8	BH34	85	86
880-20658-9	BH35	95	88
880-20658-10	BH36	88	83
880-20658-11	SW1A	96	93
880-20658-12	SW3A	91	85
880-20658-13	SW4	85	87
880-20658-14	SW5	88	86
880-20658-15	SW6	87	85
880-20658-16	SW7	87	84
880-20658-17	SW8	91	82
880-20658-18	SW9	104	98
880-20658-19	SW10	88	83
880-20658-20	SW11	87	82
880-20658-21	SW12	87	103
880-20658-22	SW13	99	104
880-20658-23	SW14	99	103
880-20658-24	SW15	108	111
880-20658-25	SW16	102	108
880-20658-26	BH1A	91	90
880-20658-26 MS	BH1A	101	78

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Surrogate Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-20658-26 MSD	BH1A	90	68 S1-
880-20658-27	BH4A	93	84
880-20658-28	BH5A	107	103
880-20658-29	BH7A	95	88
880-20658-30	BH8A	86	81
880-20658-31	BH9A	88	79
880-20658-32	BH10A	99	94
880-20658-33	BH14A	90	81
880-20658-34	BH15A	106	96
880-20658-35	BH16A	89	85
880-20658-36	BH18A	90	80
880-20658-37	BH19A	92	84
880-20658-38	BH21A	90	83
880-20658-39	BH22A	92	87
880-20658-40	BH23A	101	96
880-20658-41	BH24A	104	99
880-20658-42	BH25A	96	91
880-20658-43	BH26A	88	84
LCS 880-37641/2-A	Lab Control Sample	105	88
LCS 880-37642/2-A	Lab Control Sample	94	101
LCS 880-37677/2-A	Lab Control Sample	94	89
LCS 880-37683/2-A	Lab Control Sample	81	98
LCS 880-37780/2-A	Lab Control Sample	108	85
LCSD 880-37641/3-A	Lab Control Sample Dup	104	100
LCSD 880-37642/3-A	Lab Control Sample Dup	96	102
LCSD 880-37677/3-A	Lab Control Sample Dup	109	102
LCSD 880-37683/3-A	Lab Control Sample Dup	100	117
LCSD 880-37780/3-A	Lab Control Sample Dup	112	88
MB 880-37641/1-A	Method Blank	101	105
MB 880-37642/1-A	Method Blank	112	130
MB 880-37677/1-A	Method Blank	101	104
MB 880-37683/1-A	Method Blank	111	138 S1+
MB 880-37780/1-A	Method Blank	101	99

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37622/5-A

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37622

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 09:35	10/24/22 10:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/24/22 09:35	10/24/22 10:58	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/24/22 09:35	10/24/22 10:58	1

Lab Sample ID: MB 880-37637/5-A

Matrix: Solid

Analysis Batch: 37613

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		10/24/22 11:00	10/24/22 12:47	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		10/24/22 11:00	10/24/22 12:47	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		10/24/22 11:00	10/24/22 12:47	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 11:00	10/24/22 12:47	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/24/22 11:00	10/24/22 12:47	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 11:00	10/24/22 12:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130	10/24/22 11:00	10/24/22 12:47	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/24/22 11:00	10/24/22 12:47	1

Lab Sample ID: LCS 880-37637/1-A

Matrix: Solid

Analysis Batch: 37613

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09636		mg/Kg		96	70 - 130
Toluene	0.100	0.09773		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.1166		mg/Kg		117	70 - 130
m-Xylene & p-Xylene	0.200	0.2216		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1108		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-37637/2-A

Matrix: Solid

Analysis Batch: 37613

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37637

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08008		mg/Kg		80	70 - 130	18	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-37637/2-A

Matrix: Solid

Analysis Batch: 37613

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37637

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08542		mg/Kg		85	70 - 130	13	35
Ethylbenzene	0.100	0.09298		mg/Kg		93	70 - 130	23	35
m-Xylene & p-Xylene	0.200	0.1775		mg/Kg		89	70 - 130	22	35
o-Xylene	0.100	0.09230		mg/Kg		92	70 - 130	18	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-37669/5-A

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		10/24/22 12:38	10/24/22 21:32	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		10/24/22 12:38	10/24/22 21:32	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		10/24/22 12:38	10/24/22 21:32	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:38	10/24/22 21:32	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/24/22 12:38	10/24/22 21:32	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:38	10/24/22 21:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	10/24/22 12:38	10/24/22 21:32	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/24/22 12:38	10/24/22 21:32	1

Lab Sample ID: LCS 880-37669/1-A

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37669

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09772		mg/Kg		98	70 - 130
Toluene	0.100	0.08460		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08133		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.200	0.1639		mg/Kg		82	70 - 130
o-Xylene	0.100	0.08190		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-37669/2-A

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37669

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09750		mg/Kg		98	70 - 130	0	35
Toluene	0.100	0.09522		mg/Kg		95	70 - 130	12	35
Ethylbenzene	0.100	0.1016		mg/Kg		102	70 - 130	22	35

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-37669/2-A

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37669

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.2182		mg/Kg		109	70 - 130	28	35
o-Xylene	0.100	0.1090		mg/Kg		109	70 - 130	28	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-20658-1 MS

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: BH27A

Prep Type: Total/NA

Prep Batch: 37669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000387	U	0.0996	0.08294		mg/Kg		83	70 - 130
Toluene	<0.000458	U	0.0996	0.08402		mg/Kg		84	70 - 130
Ethylbenzene	<0.000567	U	0.0996	0.09330		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.199	0.1984		mg/Kg		100	70 - 130
o-Xylene	<0.000345	U	0.0996	0.09882		mg/Kg		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-20658-1 MSD

Matrix: Solid

Analysis Batch: 37616

Client Sample ID: BH27A

Prep Type: Total/NA

Prep Batch: 37669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000387	U	0.0990	0.08743		mg/Kg		88	70 - 130	5	35
Toluene	<0.000458	U	0.0990	0.08516		mg/Kg		86	70 - 130	1	35
Ethylbenzene	<0.000567	U	0.0990	0.09218		mg/Kg		93	70 - 130	1	35
m-Xylene & p-Xylene	<0.00101	U	0.198	0.1964		mg/Kg		99	70 - 130	1	35
o-Xylene	<0.000345	U	0.0990	0.09842		mg/Kg		99	70 - 130	0	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-37670/5-A

Matrix: Solid

Analysis Batch: 37766

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/24/22 12:42	10/25/22 12:43	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	10/24/22 12:42	10/25/22 12:43	1
1,4-Difluorobenzene (Surr)	101		70 - 130	10/24/22 12:42	10/25/22 12:43	1

Lab Sample ID: LCS 880-37670/1-A

Matrix: Solid

Analysis Batch: 37766

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1123		mg/Kg		112	70 - 130
Toluene	0.100	0.09322		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.1074		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2065		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: LCSD 880-37670/2-A

Matrix: Solid

Analysis Batch: 37766

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37670

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1079		mg/Kg		108	70 - 130	4	35
Toluene	0.100	0.1010		mg/Kg		101	70 - 130	8	35
Ethylbenzene	0.100	0.1096		mg/Kg		110	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2105		mg/Kg		105	70 - 130	2	35
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: MB 880-37771/5-A

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37771

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		10/25/22 09:18	10/25/22 11:17	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		10/25/22 09:18	10/25/22 11:17	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		10/25/22 09:18	10/25/22 11:17	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		10/25/22 09:18	10/25/22 11:17	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		10/25/22 09:18	10/25/22 11:17	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		10/25/22 09:18	10/25/22 11:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/25/22 09:18	10/25/22 11:17	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/25/22 09:18	10/25/22 11:17	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCS 880-37771/1-A

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09289		mg/Kg		93	70 - 130
Toluene	0.100	0.09527		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2246		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1114		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-37771/2-A

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37771

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09042		mg/Kg		90	70 - 130	3	35
Toluene	0.100	0.08853		mg/Kg		89	70 - 130	7	35
Ethylbenzene	0.100	0.09376		mg/Kg		94	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2014		mg/Kg		101	70 - 130	11	35
o-Xylene	0.100	0.09893		mg/Kg		99	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-20658-26 MS

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: BH1A

Prep Type: Total/NA

Prep Batch: 37771

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000387	U	0.100	0.1001		mg/Kg		100	70 - 130
Toluene	<0.000459	U	0.100	0.1008		mg/Kg		100	70 - 130
Ethylbenzene	<0.000568	U	0.100	0.1138		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	<0.00102	U	0.201	0.2408		mg/Kg		120	70 - 130
o-Xylene	0.000364	J	0.100	0.1206		mg/Kg		120	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-20658-26 MSD

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: BH1A

Prep Type: Total/NA

Prep Batch: 37771

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000387	U	0.0998	0.08717		mg/Kg		87	70 - 130	14	35
Toluene	<0.000459	U	0.0998	0.08872		mg/Kg		89	70 - 130	13	35
Ethylbenzene	<0.000568	U	0.0998	0.09580		mg/Kg		96	70 - 130	17	35

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: 880-20658-26 MSD

Matrix: Solid

Analysis Batch: 37768

Client Sample ID: BH1A

Prep Type: Total/NA

Prep Batch: 37771

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00102	U	0.200	0.2055		mg/Kg		103	70 - 130	16	35
o-Xylene	0.000364	J	0.0998	0.1021		mg/Kg		102	70 - 130	17	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	125		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

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

Lab Sample ID: MB 880-37641/1-A

Matrix: Solid

Analysis Batch: 37605

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/24/22 20:27	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/24/22 20:27	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:10	10/24/22 20:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				10/24/22 11:10	10/24/22 20:27	1
o-Terphenyl	105		70 - 130				10/24/22 11:10	10/24/22 20:27	1

Lab Sample ID: LCS 880-37641/2-A

Matrix: Solid

Analysis Batch: 37605

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	846.2		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	876.2		mg/Kg		88	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: LCSD 880-37641/3-A

Matrix: Solid

Analysis Batch: 37605

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37641

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	811.3		mg/Kg		81	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	958.2		mg/Kg		96	70 - 130	9	20

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-37641/3-A

Matrix: Solid

Analysis Batch: 37605

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37641

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: MB 880-37642/1-A

Matrix: Solid

Analysis Batch: 37607

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37642

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	17.21	J	50.0	15.0	mg/Kg		10/24/22 11:14	10/24/22 20:27	1	
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:14	10/24/22 20:27	1	
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 11:14	10/24/22 20:27	1	
	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	112		70 - 130				10/24/22 11:14	10/24/22 20:27	1	
o-Terphenyl	130		70 - 130				10/24/22 11:14	10/24/22 20:27	1	

Lab Sample ID: LCS 880-37642/2-A

Matrix: Solid

Analysis Batch: 37607

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37642

			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	964.9		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	856.0		mg/Kg		86	70 - 130		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: LCSD 880-37642/3-A

Matrix: Solid

Analysis Batch: 37607

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37642

			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1008		mg/Kg		101	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	889.5		mg/Kg		89	70 - 130	4	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	102		70 - 130								

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: MB 880-37677/1-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 09:01	1
Diesel Range Organics (Over C10-C28)	17.20	J	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 09:01	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 13:10	10/25/22 09:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				10/24/22 13:10	10/25/22 09:01	1
o-Terphenyl	104		70 - 130				10/24/22 13:10	10/25/22 09:01	1

Lab Sample ID: LCS 880-37677/2-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	844.9		mg/Kg		84	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	906.0		mg/Kg		91	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
1-Chlorooctane	94		70 - 130					
o-Terphenyl	89		70 - 130					

Lab Sample ID: LCSD 880-37677/3-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	947.7		mg/Kg		95	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	999.5		mg/Kg		100	70 - 130	10	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	109		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 880-20658-1 MS

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: BH27A

Prep Type: Total/NA

Prep Batch: 37677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	998	1011		mg/Kg		101	70 - 130	
Diesel Range Organics (Over C10-C28)	<14.9	U	998	1000		mg/Kg		100	70 - 130	

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: 880-20658-1 MS

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: BH27A

Prep Type: Total/NA

Prep Batch: 37677

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-20658-1 MSD

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: BH27A

Prep Type: Total/NA

Prep Batch: 37677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	998	887.4		mg/Kg		89	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<14.9	U	998	940.4		mg/Kg		94	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: MB 880-37683/1-A

Matrix: Solid

Analysis Batch: 37760

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 09:01	1
Diesel Range Organics (Over C10-C28)	18.27	J	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 09:01	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/24/22 14:09	10/25/22 09:01	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	111		70 - 130	10/24/22 14:09	10/25/22 09:01	1
o-Terphenyl	138	S1+	70 - 130	10/24/22 14:09	10/25/22 09:01	1

Lab Sample ID: LCS 880-37683/2-A

Matrix: Solid

Analysis Batch: 37760

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	868.6		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	778.0		mg/Kg		78	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	98		70 - 130

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-37683/3-A

Matrix: Solid

Analysis Batch: 37760

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1037		mg/Kg		104	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	1000	960.1	*1	mg/Kg		96	70 - 130	21	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	117		70 - 130						

Lab Sample ID: MB 880-37780/1-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37780

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 20:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 20:11	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		10/25/22 09:52	10/25/22 20:11	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				10/25/22 09:52	10/25/22 20:11	1
o-Terphenyl	99		70 - 130				10/25/22 09:52	10/25/22 20:11	1

Lab Sample ID: LCS 880-37780/2-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37780

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	846.2		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	846.1		mg/Kg		85	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	85		70 - 130						

Lab Sample ID: LCSD 880-37780/3-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37780

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	769.0		mg/Kg		77	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	834.5		mg/Kg		83	70 - 130	1	20

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Lab Sample ID: LCSD 880-37780/3-A

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 37780

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: 880-20658-26 MS

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: BH1A

Prep Type: Total/NA

Prep Batch: 37780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	998	872.9		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<15.0	U	998	899.2		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	78		70 - 130

Lab Sample ID: 880-20658-26 MSD

Matrix: Solid

Analysis Batch: 37758

Client Sample ID: BH1A

Prep Type: Total/NA

Prep Batch: 37780

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	998	850.3		mg/Kg		85	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<15.0	U	998	801.0		mg/Kg		80	70 - 130	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	68	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37576/1-A

Matrix: Solid

Analysis Batch: 37635

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			10/24/22 09:50	1

Lab Sample ID: LCS 880-37576/2-A

Matrix: Solid

Analysis Batch: 37635

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.4		mg/Kg		106	90 - 110

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-37576/3-A

Matrix: Solid

Analysis Batch: 37635

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	265.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 880-20658-21 MS

Matrix: Solid

Analysis Batch: 37635

Client Sample ID: SW12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0		248	279.5		mg/Kg		103	90 - 110		

Lab Sample ID: 880-20658-21 MSD

Matrix: Solid

Analysis Batch: 37635

Client Sample ID: SW12

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0		248	272.6		mg/Kg		100	90 - 110	3	20

Lab Sample ID: MB 880-37650/1-A

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			10/24/22 23:47	1

Lab Sample ID: LCS 880-37650/2-A

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	258.7		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-37650/3-A

Matrix: Solid

Analysis Batch: 37770

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	255.7		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-20658-1 MS

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: BH27A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	227		250	487.7		mg/Kg		105	90 - 110		

Lab Sample ID: 880-20658-1 MSD

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: BH27A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	227		250	483.5		mg/Kg		103	90 - 110	1	20

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-20658-11 MS

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: SW1A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	28.3		248	289.2		mg/Kg		105	90 - 110

Lab Sample ID: 880-20658-11 MSD

Matrix: Solid

Analysis Batch: 37770

Client Sample ID: SW1A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	28.3		248	289.9		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-37781/1-A

Matrix: Solid

Analysis Batch: 37823

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			10/25/22 23:53	1

Lab Sample ID: LCS 880-37781/2-A

Matrix: Solid

Analysis Batch: 37823

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	207.8	*-	mg/Kg		83	90 - 110

Lab Sample ID: LCSD 880-37781/3-A

Matrix: Solid

Analysis Batch: 37823

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	229.4		mg/Kg		92	90 - 110	10	20

Lab Sample ID: 880-20658-26 MS

Matrix: Solid

Analysis Batch: 37823

Client Sample ID: BH1A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	35.3	*-	252	262.7		mg/Kg		90	90 - 110

Lab Sample ID: 880-20658-26 MSD

Matrix: Solid

Analysis Batch: 37823

Client Sample ID: BH1A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.3	*-	252	260.5		mg/Kg		90	90 - 110	1	20

Lab Sample ID: MB 880-37782/1-A

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			10/25/22 16:01	1

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QC Sample Results

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-37782/2-A

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	272.9		mg/Kg		109	90 - 110

Lab Sample ID: LCSD 880-37782/3-A

Matrix: Solid

Analysis Batch: 37824

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	274.0		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 880-20658-28 MS

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: BH5A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	22.4		251	275.3		mg/Kg		101	90 - 110

Lab Sample ID: 880-20658-28 MSD

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: BH5A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	22.4		251	275.0		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-20658-38 MS

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: BH21A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.6		253	283.9		mg/Kg		100	90 - 110

Lab Sample ID: 880-20658-38 MSD

Matrix: Solid

Analysis Batch: 37824

Client Sample ID: BH21A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	30.6		253	284.2		mg/Kg		100	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC VOA

Analysis Batch: 37613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-25	SW16	Total/NA	Solid	8021B	37637
MB 880-37637/5-A	Method Blank	Total/NA	Solid	8021B	37637
LCS 880-37637/1-A	Lab Control Sample	Total/NA	Solid	8021B	37637
LCSD 880-37637/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37637

Analysis Batch: 37616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	8021B	37669
880-20658-2	BH28A	Total/NA	Solid	8021B	37669
880-20658-3	BH29A	Total/NA	Solid	8021B	37669
880-20658-4	BH30A	Total/NA	Solid	8021B	37669
880-20658-5	BH31A	Total/NA	Solid	8021B	37669
880-20658-6	BH32A	Total/NA	Solid	8021B	37669
880-20658-7	BH33A	Total/NA	Solid	8021B	37669
880-20658-8	BH34	Total/NA	Solid	8021B	37669
880-20658-9	BH35	Total/NA	Solid	8021B	37669
880-20658-10	BH36	Total/NA	Solid	8021B	37669
880-20658-11	SW1A	Total/NA	Solid	8021B	37669
880-20658-12	SW3A	Total/NA	Solid	8021B	37669
880-20658-13	SW4	Total/NA	Solid	8021B	37669
880-20658-14	SW5	Total/NA	Solid	8021B	37669
880-20658-15	SW6	Total/NA	Solid	8021B	37669
880-20658-16	SW7	Total/NA	Solid	8021B	37669
880-20658-17	SW8	Total/NA	Solid	8021B	37669
880-20658-18	SW9	Total/NA	Solid	8021B	37669
880-20658-19	SW10	Total/NA	Solid	8021B	37669
880-20658-20	SW11	Total/NA	Solid	8021B	37669
MB 880-37622/5-A	Method Blank	Total/NA	Solid	8021B	37622
MB 880-37669/5-A	Method Blank	Total/NA	Solid	8021B	37669
LCS 880-37669/1-A	Lab Control Sample	Total/NA	Solid	8021B	37669
LCSD 880-37669/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37669
880-20658-1 MS	BH27A	Total/NA	Solid	8021B	37669
880-20658-1 MSD	BH27A	Total/NA	Solid	8021B	37669

Prep Batch: 37622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-37622/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 37637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-25	SW16	Total/NA	Solid	5035	
MB 880-37637/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37637/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37637/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 37669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	5035	
880-20658-2	BH28A	Total/NA	Solid	5035	
880-20658-3	BH29A	Total/NA	Solid	5035	
880-20658-4	BH30A	Total/NA	Solid	5035	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC VOA (Continued)

Prep Batch: 37669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-5	BH31A	Total/NA	Solid	5035	
880-20658-6	BH32A	Total/NA	Solid	5035	
880-20658-7	BH33A	Total/NA	Solid	5035	
880-20658-8	BH34	Total/NA	Solid	5035	
880-20658-9	BH35	Total/NA	Solid	5035	
880-20658-10	BH36	Total/NA	Solid	5035	
880-20658-11	SW1A	Total/NA	Solid	5035	
880-20658-12	SW3A	Total/NA	Solid	5035	
880-20658-13	SW4	Total/NA	Solid	5035	
880-20658-14	SW5	Total/NA	Solid	5035	
880-20658-15	SW6	Total/NA	Solid	5035	
880-20658-16	SW7	Total/NA	Solid	5035	
880-20658-17	SW8	Total/NA	Solid	5035	
880-20658-18	SW9	Total/NA	Solid	5035	
880-20658-19	SW10	Total/NA	Solid	5035	
880-20658-20	SW11	Total/NA	Solid	5035	
MB 880-37669/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37669/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37669/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20658-1 MS	BH27A	Total/NA	Solid	5035	
880-20658-1 MSD	BH27A	Total/NA	Solid	5035	

Prep Batch: 37670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Total/NA	Solid	5035	
880-20658-22	SW13	Total/NA	Solid	5035	
880-20658-23	SW14	Total/NA	Solid	5035	
880-20658-24	SW15	Total/NA	Solid	5035	
MB 880-37670/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37670/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37670/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 37766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Total/NA	Solid	8021B	37670
880-20658-22	SW13	Total/NA	Solid	8021B	37670
880-20658-23	SW14	Total/NA	Solid	8021B	37670
880-20658-24	SW15	Total/NA	Solid	8021B	37670
MB 880-37670/5-A	Method Blank	Total/NA	Solid	8021B	37670
LCS 880-37670/1-A	Lab Control Sample	Total/NA	Solid	8021B	37670
LCSD 880-37670/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37670

Analysis Batch: 37768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-26	BH1A	Total/NA	Solid	8021B	37771
880-20658-27	BH4A	Total/NA	Solid	8021B	37771
880-20658-28	BH5A	Total/NA	Solid	8021B	37771
880-20658-29	BH7A	Total/NA	Solid	8021B	37771
880-20658-30	BH8A	Total/NA	Solid	8021B	37771
880-20658-31	BH9A	Total/NA	Solid	8021B	37771
880-20658-32	BH10A	Total/NA	Solid	8021B	37771

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC VOA (Continued)

Analysis Batch: 37768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-33	BH14A	Total/NA	Solid	8021B	37771
880-20658-34	BH15A	Total/NA	Solid	8021B	37771
880-20658-35	BH16A	Total/NA	Solid	8021B	37771
880-20658-36	BH18A	Total/NA	Solid	8021B	37771
880-20658-37	BH19A	Total/NA	Solid	8021B	37771
880-20658-38	BH21A	Total/NA	Solid	8021B	37771
880-20658-39	BH22A	Total/NA	Solid	8021B	37771
880-20658-40	BH23A	Total/NA	Solid	8021B	37771
880-20658-41	BH24A	Total/NA	Solid	8021B	37771
880-20658-42	BH25A	Total/NA	Solid	8021B	37771
880-20658-43	BH26A	Total/NA	Solid	8021B	37771
MB 880-37771/5-A	Method Blank	Total/NA	Solid	8021B	37771
LCS 880-37771/1-A	Lab Control Sample	Total/NA	Solid	8021B	37771
LCSD 880-37771/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37771
880-20658-26 MS	BH1A	Total/NA	Solid	8021B	37771
880-20658-26 MSD	BH1A	Total/NA	Solid	8021B	37771

Prep Batch: 37771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-26	BH1A	Total/NA	Solid	5035	
880-20658-27	BH4A	Total/NA	Solid	5035	
880-20658-28	BH5A	Total/NA	Solid	5035	
880-20658-29	BH7A	Total/NA	Solid	5035	
880-20658-30	BH8A	Total/NA	Solid	5035	
880-20658-31	BH9A	Total/NA	Solid	5035	
880-20658-32	BH10A	Total/NA	Solid	5035	
880-20658-33	BH14A	Total/NA	Solid	5035	
880-20658-34	BH15A	Total/NA	Solid	5035	
880-20658-35	BH16A	Total/NA	Solid	5035	
880-20658-36	BH18A	Total/NA	Solid	5035	
880-20658-37	BH19A	Total/NA	Solid	5035	
880-20658-38	BH21A	Total/NA	Solid	5035	
880-20658-39	BH22A	Total/NA	Solid	5035	
880-20658-40	BH23A	Total/NA	Solid	5035	
880-20658-41	BH24A	Total/NA	Solid	5035	
880-20658-42	BH25A	Total/NA	Solid	5035	
880-20658-43	BH26A	Total/NA	Solid	5035	
MB 880-37771/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37771/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37771/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20658-26 MS	BH1A	Total/NA	Solid	5035	
880-20658-26 MSD	BH1A	Total/NA	Solid	5035	

Analysis Batch: 37816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	Total BTEX	
880-20658-2	BH28A	Total/NA	Solid	Total BTEX	
880-20658-3	BH29A	Total/NA	Solid	Total BTEX	
880-20658-4	BH30A	Total/NA	Solid	Total BTEX	
880-20658-5	BH31A	Total/NA	Solid	Total BTEX	
880-20658-6	BH32A	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC VOA (Continued)

Analysis Batch: 37816 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-7	BH33A	Total/NA	Solid	Total BTEX	
880-20658-8	BH34	Total/NA	Solid	Total BTEX	
880-20658-9	BH35	Total/NA	Solid	Total BTEX	
880-20658-10	BH36	Total/NA	Solid	Total BTEX	
880-20658-11	SW1A	Total/NA	Solid	Total BTEX	
880-20658-12	SW3A	Total/NA	Solid	Total BTEX	
880-20658-13	SW4	Total/NA	Solid	Total BTEX	
880-20658-14	SW5	Total/NA	Solid	Total BTEX	
880-20658-15	SW6	Total/NA	Solid	Total BTEX	
880-20658-16	SW7	Total/NA	Solid	Total BTEX	
880-20658-17	SW8	Total/NA	Solid	Total BTEX	
880-20658-18	SW9	Total/NA	Solid	Total BTEX	
880-20658-19	SW10	Total/NA	Solid	Total BTEX	
880-20658-20	SW11	Total/NA	Solid	Total BTEX	
880-20658-21	SW12	Total/NA	Solid	Total BTEX	
880-20658-22	SW13	Total/NA	Solid	Total BTEX	
880-20658-23	SW14	Total/NA	Solid	Total BTEX	
880-20658-24	SW15	Total/NA	Solid	Total BTEX	
880-20658-25	SW16	Total/NA	Solid	Total BTEX	
880-20658-26	BH1A	Total/NA	Solid	Total BTEX	
880-20658-27	BH4A	Total/NA	Solid	Total BTEX	
880-20658-28	BH5A	Total/NA	Solid	Total BTEX	
880-20658-29	BH7A	Total/NA	Solid	Total BTEX	
880-20658-30	BH8A	Total/NA	Solid	Total BTEX	
880-20658-31	BH9A	Total/NA	Solid	Total BTEX	
880-20658-32	BH10A	Total/NA	Solid	Total BTEX	
880-20658-33	BH14A	Total/NA	Solid	Total BTEX	
880-20658-34	BH15A	Total/NA	Solid	Total BTEX	
880-20658-35	BH16A	Total/NA	Solid	Total BTEX	
880-20658-36	BH18A	Total/NA	Solid	Total BTEX	
880-20658-37	BH19A	Total/NA	Solid	Total BTEX	
880-20658-38	BH21A	Total/NA	Solid	Total BTEX	
880-20658-39	BH22A	Total/NA	Solid	Total BTEX	
880-20658-40	BH23A	Total/NA	Solid	Total BTEX	
880-20658-41	BH24A	Total/NA	Solid	Total BTEX	
880-20658-42	BH25A	Total/NA	Solid	Total BTEX	
880-20658-43	BH26A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 37605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-22	SW13	Total/NA	Solid	8015B NM	37641
880-20658-23	SW14	Total/NA	Solid	8015B NM	37641
880-20658-24	SW15	Total/NA	Solid	8015B NM	37641
MB 880-37641/1-A	Method Blank	Total/NA	Solid	8015B NM	37641
LCS 880-37641/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37641
LCSD 880-37641/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37641

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QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC Semi VOA

Analysis Batch: 37607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-25	SW16	Total/NA	Solid	8015B NM	37642
MB 880-37642/1-A	Method Blank	Total/NA	Solid	8015B NM	37642
LCS 880-37642/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37642
LCSD 880-37642/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37642

Prep Batch: 37641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-22	SW13	Total/NA	Solid	8015NM Prep	
880-20658-23	SW14	Total/NA	Solid	8015NM Prep	
880-20658-24	SW15	Total/NA	Solid	8015NM Prep	
MB 880-37641/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37641/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37641/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 37642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-25	SW16	Total/NA	Solid	8015NM Prep	
MB 880-37642/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37642/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37642/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 37677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	8015NM Prep	
880-20658-2	BH28A	Total/NA	Solid	8015NM Prep	
880-20658-3	BH29A	Total/NA	Solid	8015NM Prep	
880-20658-4	BH30A	Total/NA	Solid	8015NM Prep	
880-20658-5	BH31A	Total/NA	Solid	8015NM Prep	
880-20658-6	BH32A	Total/NA	Solid	8015NM Prep	
880-20658-7	BH33A	Total/NA	Solid	8015NM Prep	
880-20658-8	BH34	Total/NA	Solid	8015NM Prep	
880-20658-9	BH35	Total/NA	Solid	8015NM Prep	
880-20658-10	BH36	Total/NA	Solid	8015NM Prep	
880-20658-11	SW1A	Total/NA	Solid	8015NM Prep	
880-20658-12	SW3A	Total/NA	Solid	8015NM Prep	
880-20658-13	SW4	Total/NA	Solid	8015NM Prep	
880-20658-14	SW5	Total/NA	Solid	8015NM Prep	
880-20658-15	SW6	Total/NA	Solid	8015NM Prep	
880-20658-16	SW7	Total/NA	Solid	8015NM Prep	
880-20658-17	SW8	Total/NA	Solid	8015NM Prep	
880-20658-18	SW9	Total/NA	Solid	8015NM Prep	
880-20658-19	SW10	Total/NA	Solid	8015NM Prep	
880-20658-20	SW11	Total/NA	Solid	8015NM Prep	
MB 880-37677/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37677/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37677/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20658-1 MS	BH27A	Total/NA	Solid	8015NM Prep	
880-20658-1 MSD	BH27A	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC Semi VOA

Prep Batch: 37683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Total/NA	Solid	8015NM Prep	
MB 880-37683/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37683/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37683/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	8015B NM	37677
880-20658-2	BH28A	Total/NA	Solid	8015B NM	37677
880-20658-3	BH29A	Total/NA	Solid	8015B NM	37677
880-20658-4	BH30A	Total/NA	Solid	8015B NM	37677
880-20658-5	BH31A	Total/NA	Solid	8015B NM	37677
880-20658-6	BH32A	Total/NA	Solid	8015B NM	37677
880-20658-7	BH33A	Total/NA	Solid	8015B NM	37677
880-20658-8	BH34	Total/NA	Solid	8015B NM	37677
880-20658-9	BH35	Total/NA	Solid	8015B NM	37677
880-20658-10	BH36	Total/NA	Solid	8015B NM	37677
880-20658-11	SW1A	Total/NA	Solid	8015B NM	37677
880-20658-12	SW3A	Total/NA	Solid	8015B NM	37677
880-20658-13	SW4	Total/NA	Solid	8015B NM	37677
880-20658-14	SW5	Total/NA	Solid	8015B NM	37677
880-20658-15	SW6	Total/NA	Solid	8015B NM	37677
880-20658-16	SW7	Total/NA	Solid	8015B NM	37677
880-20658-17	SW8	Total/NA	Solid	8015B NM	37677
880-20658-18	SW9	Total/NA	Solid	8015B NM	37677
880-20658-19	SW10	Total/NA	Solid	8015B NM	37677
880-20658-20	SW11	Total/NA	Solid	8015B NM	37677
880-20658-26	BH1A	Total/NA	Solid	8015B NM	37780
880-20658-27	BH4A	Total/NA	Solid	8015B NM	37780
880-20658-28	BH5A	Total/NA	Solid	8015B NM	37780
880-20658-29	BH7A	Total/NA	Solid	8015B NM	37780
880-20658-30	BH8A	Total/NA	Solid	8015B NM	37780
880-20658-31	BH9A	Total/NA	Solid	8015B NM	37780
880-20658-32	BH10A	Total/NA	Solid	8015B NM	37780
880-20658-33	BH14A	Total/NA	Solid	8015B NM	37780
880-20658-34	BH15A	Total/NA	Solid	8015B NM	37780
880-20658-35	BH16A	Total/NA	Solid	8015B NM	37780
880-20658-36	BH18A	Total/NA	Solid	8015B NM	37780
880-20658-37	BH19A	Total/NA	Solid	8015B NM	37780
880-20658-38	BH21A	Total/NA	Solid	8015B NM	37780
880-20658-39	BH22A	Total/NA	Solid	8015B NM	37780
880-20658-40	BH23A	Total/NA	Solid	8015B NM	37780
880-20658-41	BH24A	Total/NA	Solid	8015B NM	37780
880-20658-42	BH25A	Total/NA	Solid	8015B NM	37780
880-20658-43	BH26A	Total/NA	Solid	8015B NM	37780
MB 880-37677/1-A	Method Blank	Total/NA	Solid	8015B NM	37677
MB 880-37780/1-A	Method Blank	Total/NA	Solid	8015B NM	37780
LCS 880-37677/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37677
LCS 880-37780/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37780
LCSD 880-37677/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37677
LCSD 880-37780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37780

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC Semi VOA (Continued)

Analysis Batch: 37758 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1 MS	BH27A	Total/NA	Solid	8015B NM	37677
880-20658-1 MSD	BH27A	Total/NA	Solid	8015B NM	37677
880-20658-26 MS	BH1A	Total/NA	Solid	8015B NM	37780
880-20658-26 MSD	BH1A	Total/NA	Solid	8015B NM	37780

Analysis Batch: 37760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Total/NA	Solid	8015B NM	37683
MB 880-37683/1-A	Method Blank	Total/NA	Solid	8015B NM	37683
LCS 880-37683/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37683
LCSD 880-37683/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37683

Analysis Batch: 37773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Total/NA	Solid	8015 NM	
880-20658-2	BH28A	Total/NA	Solid	8015 NM	
880-20658-3	BH29A	Total/NA	Solid	8015 NM	
880-20658-4	BH30A	Total/NA	Solid	8015 NM	
880-20658-5	BH31A	Total/NA	Solid	8015 NM	
880-20658-6	BH32A	Total/NA	Solid	8015 NM	
880-20658-7	BH33A	Total/NA	Solid	8015 NM	
880-20658-8	BH34	Total/NA	Solid	8015 NM	
880-20658-9	BH35	Total/NA	Solid	8015 NM	
880-20658-10	BH36	Total/NA	Solid	8015 NM	
880-20658-11	SW1A	Total/NA	Solid	8015 NM	
880-20658-12	SW3A	Total/NA	Solid	8015 NM	
880-20658-13	SW4	Total/NA	Solid	8015 NM	
880-20658-14	SW5	Total/NA	Solid	8015 NM	
880-20658-15	SW6	Total/NA	Solid	8015 NM	
880-20658-16	SW7	Total/NA	Solid	8015 NM	
880-20658-17	SW8	Total/NA	Solid	8015 NM	
880-20658-18	SW9	Total/NA	Solid	8015 NM	
880-20658-19	SW10	Total/NA	Solid	8015 NM	
880-20658-20	SW11	Total/NA	Solid	8015 NM	
880-20658-21	SW12	Total/NA	Solid	8015 NM	
880-20658-22	SW13	Total/NA	Solid	8015 NM	
880-20658-23	SW14	Total/NA	Solid	8015 NM	
880-20658-24	SW15	Total/NA	Solid	8015 NM	
880-20658-25	SW16	Total/NA	Solid	8015 NM	
880-20658-26	BH1A	Total/NA	Solid	8015 NM	
880-20658-27	BH4A	Total/NA	Solid	8015 NM	
880-20658-28	BH5A	Total/NA	Solid	8015 NM	
880-20658-29	BH7A	Total/NA	Solid	8015 NM	
880-20658-30	BH8A	Total/NA	Solid	8015 NM	
880-20658-31	BH9A	Total/NA	Solid	8015 NM	
880-20658-32	BH10A	Total/NA	Solid	8015 NM	
880-20658-33	BH14A	Total/NA	Solid	8015 NM	
880-20658-34	BH15A	Total/NA	Solid	8015 NM	
880-20658-35	BH16A	Total/NA	Solid	8015 NM	
880-20658-36	BH18A	Total/NA	Solid	8015 NM	
880-20658-37	BH19A	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

GC Semi VOA (Continued)

Analysis Batch: 37773 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-38	BH21A	Total/NA	Solid	8015 NM	
880-20658-39	BH22A	Total/NA	Solid	8015 NM	
880-20658-40	BH23A	Total/NA	Solid	8015 NM	
880-20658-41	BH24A	Total/NA	Solid	8015 NM	
880-20658-42	BH25A	Total/NA	Solid	8015 NM	
880-20658-43	BH26A	Total/NA	Solid	8015 NM	

Prep Batch: 37780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-26	BH1A	Total/NA	Solid	8015NM Prep	
880-20658-27	BH4A	Total/NA	Solid	8015NM Prep	
880-20658-28	BH5A	Total/NA	Solid	8015NM Prep	
880-20658-29	BH7A	Total/NA	Solid	8015NM Prep	
880-20658-30	BH8A	Total/NA	Solid	8015NM Prep	
880-20658-31	BH9A	Total/NA	Solid	8015NM Prep	
880-20658-32	BH10A	Total/NA	Solid	8015NM Prep	
880-20658-33	BH14A	Total/NA	Solid	8015NM Prep	
880-20658-34	BH15A	Total/NA	Solid	8015NM Prep	
880-20658-35	BH16A	Total/NA	Solid	8015NM Prep	
880-20658-36	BH18A	Total/NA	Solid	8015NM Prep	
880-20658-37	BH19A	Total/NA	Solid	8015NM Prep	
880-20658-38	BH21A	Total/NA	Solid	8015NM Prep	
880-20658-39	BH22A	Total/NA	Solid	8015NM Prep	
880-20658-40	BH23A	Total/NA	Solid	8015NM Prep	
880-20658-41	BH24A	Total/NA	Solid	8015NM Prep	
880-20658-42	BH25A	Total/NA	Solid	8015NM Prep	
880-20658-43	BH26A	Total/NA	Solid	8015NM Prep	
MB 880-37780/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37780/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20658-26 MS	BH1A	Total/NA	Solid	8015NM Prep	
880-20658-26 MSD	BH1A	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 37576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Soluble	Solid	DI Leach	
880-20658-22	SW13	Soluble	Solid	DI Leach	
880-20658-23	SW14	Soluble	Solid	DI Leach	
880-20658-24	SW15	Soluble	Solid	DI Leach	
880-20658-25	SW16	Soluble	Solid	DI Leach	
MB 880-37576/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37576/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37576/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20658-21 MS	SW12	Soluble	Solid	DI Leach	
880-20658-21 MSD	SW12	Soluble	Solid	DI Leach	

Analysis Batch: 37635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-21	SW12	Soluble	Solid	300.0	37576

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

HPLC/IC (Continued)

Analysis Batch: 37635 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-22	SW13	Soluble	Solid	300.0	37576
880-20658-23	SW14	Soluble	Solid	300.0	37576
880-20658-24	SW15	Soluble	Solid	300.0	37576
880-20658-25	SW16	Soluble	Solid	300.0	37576
MB 880-37576/1-A	Method Blank	Soluble	Solid	300.0	37576
LCS 880-37576/2-A	Lab Control Sample	Soluble	Solid	300.0	37576
LCSD 880-37576/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37576
880-20658-21 MS	SW12	Soluble	Solid	300.0	37576
880-20658-21 MSD	SW12	Soluble	Solid	300.0	37576

Leach Batch: 37650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Soluble	Solid	DI Leach	
880-20658-2	BH28A	Soluble	Solid	DI Leach	
880-20658-3	BH29A	Soluble	Solid	DI Leach	
880-20658-4	BH30A	Soluble	Solid	DI Leach	
880-20658-5	BH31A	Soluble	Solid	DI Leach	
880-20658-6	BH32A	Soluble	Solid	DI Leach	
880-20658-7	BH33A	Soluble	Solid	DI Leach	
880-20658-8	BH34	Soluble	Solid	DI Leach	
880-20658-9	BH35	Soluble	Solid	DI Leach	
880-20658-10	BH36	Soluble	Solid	DI Leach	
880-20658-11	SW1A	Soluble	Solid	DI Leach	
880-20658-12	SW3A	Soluble	Solid	DI Leach	
880-20658-13	SW4	Soluble	Solid	DI Leach	
880-20658-14	SW5	Soluble	Solid	DI Leach	
880-20658-15	SW6	Soluble	Solid	DI Leach	
880-20658-16	SW7	Soluble	Solid	DI Leach	
880-20658-17	SW8	Soluble	Solid	DI Leach	
880-20658-18	SW9	Soluble	Solid	DI Leach	
880-20658-19	SW10	Soluble	Solid	DI Leach	
880-20658-20	SW11	Soluble	Solid	DI Leach	
MB 880-37650/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37650/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37650/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20658-1 MS	BH27A	Soluble	Solid	DI Leach	
880-20658-1 MSD	BH27A	Soluble	Solid	DI Leach	
880-20658-11 MS	SW1A	Soluble	Solid	DI Leach	
880-20658-11 MSD	SW1A	Soluble	Solid	DI Leach	

Analysis Batch: 37770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-1	BH27A	Soluble	Solid	300.0	37650
880-20658-2	BH28A	Soluble	Solid	300.0	37650
880-20658-3	BH29A	Soluble	Solid	300.0	37650
880-20658-4	BH30A	Soluble	Solid	300.0	37650
880-20658-5	BH31A	Soluble	Solid	300.0	37650
880-20658-6	BH32A	Soluble	Solid	300.0	37650
880-20658-7	BH33A	Soluble	Solid	300.0	37650
880-20658-8	BH34	Soluble	Solid	300.0	37650
880-20658-9	BH35	Soluble	Solid	300.0	37650

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

HPLC/IC (Continued)

Analysis Batch: 37770 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-10	BH36	Soluble	Solid	300.0	37650
880-20658-11	SW1A	Soluble	Solid	300.0	37650
880-20658-12	SW3A	Soluble	Solid	300.0	37650
880-20658-13	SW4	Soluble	Solid	300.0	37650
880-20658-14	SW5	Soluble	Solid	300.0	37650
880-20658-15	SW6	Soluble	Solid	300.0	37650
880-20658-16	SW7	Soluble	Solid	300.0	37650
880-20658-17	SW8	Soluble	Solid	300.0	37650
880-20658-18	SW9	Soluble	Solid	300.0	37650
880-20658-19	SW10	Soluble	Solid	300.0	37650
880-20658-20	SW11	Soluble	Solid	300.0	37650
MB 880-37650/1-A	Method Blank	Soluble	Solid	300.0	37650
LCS 880-37650/2-A	Lab Control Sample	Soluble	Solid	300.0	37650
LCSD 880-37650/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37650
880-20658-1 MS	BH27A	Soluble	Solid	300.0	37650
880-20658-1 MSD	BH27A	Soluble	Solid	300.0	37650
880-20658-11 MS	SW1A	Soluble	Solid	300.0	37650
880-20658-11 MSD	SW1A	Soluble	Solid	300.0	37650

Leach Batch: 37781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-26	BH1A	Soluble	Solid	DI Leach	
880-20658-27	BH4A	Soluble	Solid	DI Leach	
MB 880-37781/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37781/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37781/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20658-26 MS	BH1A	Soluble	Solid	DI Leach	
880-20658-26 MSD	BH1A	Soluble	Solid	DI Leach	

Leach Batch: 37782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-28	BH5A	Soluble	Solid	DI Leach	
880-20658-29	BH7A	Soluble	Solid	DI Leach	
880-20658-30	BH8A	Soluble	Solid	DI Leach	
880-20658-31	BH9A	Soluble	Solid	DI Leach	
880-20658-32	BH10A	Soluble	Solid	DI Leach	
880-20658-33	BH14A	Soluble	Solid	DI Leach	
880-20658-34	BH15A	Soluble	Solid	DI Leach	
880-20658-35	BH16A	Soluble	Solid	DI Leach	
880-20658-36	BH18A	Soluble	Solid	DI Leach	
880-20658-37	BH19A	Soluble	Solid	DI Leach	
880-20658-38	BH21A	Soluble	Solid	DI Leach	
880-20658-39	BH22A	Soluble	Solid	DI Leach	
880-20658-40	BH23A	Soluble	Solid	DI Leach	
880-20658-41	BH24A	Soluble	Solid	DI Leach	
880-20658-42	BH25A	Soluble	Solid	DI Leach	
880-20658-43	BH26A	Soluble	Solid	DI Leach	
MB 880-37782/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37782/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37782/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20658-28 MS	BH5A	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

HPLC/IC (Continued)

Leach Batch: 37782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-28 MSD	BH5A	Soluble	Solid	DI Leach	
880-20658-38 MS	BH21A	Soluble	Solid	DI Leach	
880-20658-38 MSD	BH21A	Soluble	Solid	DI Leach	

Analysis Batch: 37823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-26	BH1A	Soluble	Solid	300.0	37781
880-20658-27	BH4A	Soluble	Solid	300.0	37781
MB 880-37781/1-A	Method Blank	Soluble	Solid	300.0	37781
LCS 880-37781/2-A	Lab Control Sample	Soluble	Solid	300.0	37781
LCSD 880-37781/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37781
880-20658-26 MS	BH1A	Soluble	Solid	300.0	37781
880-20658-26 MSD	BH1A	Soluble	Solid	300.0	37781

Analysis Batch: 37824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-20658-28	BH5A	Soluble	Solid	300.0	37782
880-20658-29	BH7A	Soluble	Solid	300.0	37782
880-20658-30	BH8A	Soluble	Solid	300.0	37782
880-20658-31	BH9A	Soluble	Solid	300.0	37782
880-20658-32	BH10A	Soluble	Solid	300.0	37782
880-20658-33	BH14A	Soluble	Solid	300.0	37782
880-20658-34	BH15A	Soluble	Solid	300.0	37782
880-20658-35	BH16A	Soluble	Solid	300.0	37782
880-20658-36	BH18A	Soluble	Solid	300.0	37782
880-20658-37	BH19A	Soluble	Solid	300.0	37782
880-20658-38	BH21A	Soluble	Solid	300.0	37782
880-20658-39	BH22A	Soluble	Solid	300.0	37782
880-20658-40	BH23A	Soluble	Solid	300.0	37782
880-20658-41	BH24A	Soluble	Solid	300.0	37782
880-20658-42	BH25A	Soluble	Solid	300.0	37782
880-20658-43	BH26A	Soluble	Solid	300.0	37782
MB 880-37782/1-A	Method Blank	Soluble	Solid	300.0	37782
LCS 880-37782/2-A	Lab Control Sample	Soluble	Solid	300.0	37782
LCSD 880-37782/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37782
880-20658-28 MS	BH5A	Soluble	Solid	300.0	37782
880-20658-28 MSD	BH5A	Soluble	Solid	300.0	37782
880-20658-38 MS	BH21A	Soluble	Solid	300.0	37782
880-20658-38 MSD	BH21A	Soluble	Solid	300.0	37782

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH27A

Lab Sample ID: 880-20658-1

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 21:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 11:36	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:02	CH	EET MID

Client Sample ID: BH28A

Lab Sample ID: 880-20658-2

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 22:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 12:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:17	CH	EET MID

Client Sample ID: BH29A

Lab Sample ID: 880-20658-3

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 22:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 13:02	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:21	CH	EET MID

Client Sample ID: BH30A

Lab Sample ID: 880-20658-4

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 22:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH30A

Lab Sample ID: 880-20658-4

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 13:24	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:26	CH	EET MID

Client Sample ID: BH31A

Lab Sample ID: 880-20658-5

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 23:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 13:45	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:31	CH	EET MID

Client Sample ID: BH32A

Lab Sample ID: 880-20658-6

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 23:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 14:07	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:46	CH	EET MID

Client Sample ID: BH33A

Lab Sample ID: 880-20658-7

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 23:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 14:28	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH33A

Lab Sample ID: 880-20658-7

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:51	CH	EET MID

Client Sample ID: BH34

Lab Sample ID: 880-20658-8

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 00:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 14:50	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 00:55	CH	EET MID

Client Sample ID: BH35

Lab Sample ID: 880-20658-9

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 00:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 15:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:00	CH	EET MID

Client Sample ID: BH36

Lab Sample ID: 880-20658-10

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 00:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 15:32	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:05	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW1A

Lab Sample ID: 880-20658-11

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 02:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 16:15	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:10	CH	EET MID

Client Sample ID: SW3A

Lab Sample ID: 880-20658-12

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 02:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 16:37	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:24	CH	EET MID

Client Sample ID: SW4

Lab Sample ID: 880-20658-13

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 03:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 16:58	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:29	CH	EET MID

Client Sample ID: SW5

Lab Sample ID: 880-20658-14

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 03:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW5

Lab Sample ID: 880-20658-14

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 17:20	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:44	CH	EET MID

Client Sample ID: SW6

Lab Sample ID: 880-20658-15

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 03:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 17:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:49	CH	EET MID

Client Sample ID: SW7

Lab Sample ID: 880-20658-16

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 04:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 18:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:54	CH	EET MID

Client Sample ID: SW8

Lab Sample ID: 880-20658-17

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 04:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 18:24	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW8

Lab Sample ID: 880-20658-17

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 01:58	CH	EET MID

Client Sample ID: SW9

Lab Sample ID: 880-20658-18

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 04:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 18:45	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 02:03	CH	EET MID

Client Sample ID: SW10

Lab Sample ID: 880-20658-19

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 05:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 19:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 02:08	CH	EET MID

Client Sample ID: SW11

Lab Sample ID: 880-20658-20

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37669	10/24/22 12:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/25/22 05:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37677	10/24/22 13:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 19:28	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	37650	10/24/22 11:45	CH	EET MID
Soluble	Analysis	300.0		1			37770	10/25/22 02:13	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW12

Lab Sample ID: 880-20658-21

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37670	10/24/22 12:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37766	10/25/22 16:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37683	10/24/22 14:09	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37760	10/25/22 19:07	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37576	10/24/22 16:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37635	10/24/22 22:44	CH	EET MID

Client Sample ID: SW13

Lab Sample ID: 880-20658-22

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37670	10/24/22 12:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37766	10/25/22 16:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/25/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37641	10/24/22 11:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37605	10/25/22 04:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37576	10/24/22 16:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37635	10/24/22 22:59	CH	EET MID

Client Sample ID: SW14

Lab Sample ID: 880-20658-23

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37670	10/24/22 12:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37766	10/25/22 17:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/25/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37641	10/24/22 11:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37605	10/25/22 05:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37576	10/24/22 16:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37635	10/24/22 23:04	CH	EET MID

Client Sample ID: SW15

Lab Sample ID: 880-20658-24

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37670	10/24/22 12:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37766	10/25/22 18:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:30	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: SW15

Lab Sample ID: 880-20658-24

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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			37773	10/25/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37641	10/24/22 11:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37605	10/25/22 05:26	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	37576	10/24/22 16:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37635	10/24/22 23:18	CH	EET MID

Client Sample ID: SW16

Lab Sample ID: 880-20658-25

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37637	10/24/22 11:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37613	10/24/22 22:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 12:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/25/22 09:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37642	10/24/22 11:14	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37607	10/25/22 05:26	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	37576	10/24/22 16:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37635	10/24/22 23:23	CH	EET MID

Client Sample ID: BH1A

Lab Sample ID: 880-20658-26

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 11:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 21:15	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37781	10/25/22 10:14	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	37823	10/26/22 00:18	CH	EET MID

Client Sample ID: BH4A

Lab Sample ID: 880-20658-27

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 11:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 22:20	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH4A**Lab Sample ID: 880-20658-27****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37781	10/25/22 10:14	SMC	EET MID
Soluble	Analysis	300.0		1			37823	10/26/22 00:43	CH	EET MID

Client Sample ID: BH5A**Lab Sample ID: 880-20658-28****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 12:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 22:41	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:15	CH	EET MID

Client Sample ID: BH7A**Lab Sample ID: 880-20658-29****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 12:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 23:04	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:30	CH	EET MID

Client Sample ID: BH8A**Lab Sample ID: 880-20658-30****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 13:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 23:25	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:35	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH9A

Lab Sample ID: 880-20658-31

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 13:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/25/22 23:47	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:40	CH	EET MID

Client Sample ID: BH10A

Lab Sample ID: 880-20658-32

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 13:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 00:09	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:45	CH	EET MID

Client Sample ID: BH14A

Lab Sample ID: 880-20658-33

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 14:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/25/22 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 00:31	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 16:59	CH	EET MID

Client Sample ID: BH15A

Lab Sample ID: 880-20658-34

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 16:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH15A

Lab Sample ID: 880-20658-34

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 00:52	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:04	CH	EET MID

Client Sample ID: BH16A

Lab Sample ID: 880-20658-35

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 17:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 01:14	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:09	CH	EET MID

Client Sample ID: BH18A

Lab Sample ID: 880-20658-36

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 17:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 01:58	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:14	CH	EET MID

Client Sample ID: BH19A

Lab Sample ID: 880-20658-37

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 17:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 02:19	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH19A**Lab Sample ID: 880-20658-37****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:19	CH	EET MID

Client Sample ID: BH21A**Lab Sample ID: 880-20658-38****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 18:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 02:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:23	CH	EET MID

Client Sample ID: BH22A**Lab Sample ID: 880-20658-39****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 03:03	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:38	CH	EET MID

Client Sample ID: BH23A**Lab Sample ID: 880-20658-40****Date Collected: 10/21/22 00:00****Matrix: Solid****Date Received: 10/24/22 10:35**

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 03:25	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:43	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Client Sample ID: BH24A

Lab Sample ID: 880-20658-41

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 19:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 03:47	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 17:57	CH	EET MID

Client Sample ID: BH25A

Lab Sample ID: 880-20658-42

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 19:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 04:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 18:02	CH	EET MID

Client Sample ID: BH26A

Lab Sample ID: 880-20658-43

Date Collected: 10/21/22 00:00

Matrix: Solid

Date Received: 10/24/22 10:35

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	37771	10/25/22 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37768	10/25/22 19:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37816	10/26/22 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			37773	10/26/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37780	10/25/22 09:52	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37758	10/26/22 04:30	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37782	10/25/22 10:20	SMC	EET MID
Soluble	Analysis	300.0		1			37824	10/25/22 18:07	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Method Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

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

Eurofins Midland

Sample Summary

Client: GHD Services Inc.
Project/Site: Outland Booster

Job ID: 880-20658-1
SDG: 12594900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-20658-1	BH27A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-2	BH28A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-3	BH29A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-4	BH30A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-5	BH31A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-6	BH32A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-7	BH33A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-8	BH34	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-9	BH35	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-10	BH36	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-11	SW1A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-12	SW3A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-13	SW4	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-14	SW5	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-15	SW6	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-16	SW7	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-17	SW8	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-18	SW9	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-19	SW10	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-20	SW11	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-21	SW12	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-22	SW13	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-23	SW14	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-24	SW15	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-25	SW16	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-26	BH1A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-27	BH4A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-28	BH5A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-29	BH7A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-30	BH8A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-31	BH9A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-32	BH10A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-33	BH14A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-34	BH15A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-35	BH16A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-36	BH18A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-37	BH19A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-38	BH21A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-39	BH22A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-40	BH23A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-41	BH24A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-42	BH25A	Solid	10/21/22 00:00	10/24/22 10:35
880-20658-43	BH26A	Solid	10/21/22 00:00	10/24/22 10:35

SSOW

Chain of Custody Record

eurofins

Environment Testing
America

20658

Eurofins Environment Testing America

10/26/2022

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other					
NMAcad					
Client Contact		Project Manager: J.T. Murrey		Site Contact: J.T. Murrey	
GHD Services 2135 S Loop 250 West Midland, TX 79703 361-252-6136		Email jtmurray@ghd.com Tel/Fax:		Date: 10-21-22	
Analysis Turnaround Time		TAT if different from Below _____ ☐ CALENDAR DAYS ☒ WORKING DAYS		Carrier:	
Project Name Outland Booster		☐ 2 weeks ☐ 1 week ☒ 2 days ☐ 1 day		Job / SDG No	
P O # SSOW-12594900-2022-001				Sample Specific Notes	
Sample Identification		Sample Date	Sample Type (C=Comp G=Grab)	Matrix	# of Cont.
BH27A	10/21/2022	C	SO	1	
BH28A	10/21/2022	C	SO	1	
BH29A	10/21/2022	C	SO	1	
BH30A	10/21/2022	C	SO	1	
BH31A	10/21/2022	C	SO	1	
BH32A	10/21/2022	C	SO	1	
BH33A	10/21/2022	C	SO	1	
BH34	10/21/2022	C	SO	1	
BH35	10/21/2022	C	SO	1	
BH36	10/21/2022	C	SO	1	
SW1A	10/21/2022	C	SO	1	
SW3A	10/21/2022	C	SO	1	
Preservation Used: 1 = Ice; 2 = HCl; 3 = H2SO4; 4 = HNO3; 5 = NaOH; 6 = Other					
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample					
Special Instructions/QC Requirements & Comments: S.7154					
Custody Seals Intact ☐ Yes ☐ No		Custody Seal No		Cooler Temp (°C) Obs'd _____ Cor'd _____	
Relinquished by _____		Company _____		Received by _____	
Relinquished by _____		Company _____		Received in Laboratory by _____	
Relinquished by _____		Company _____		Received in Laboratory by _____	
Return to Client ☐		Disposal by Lab ☒		Archive for _____ Months	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Barcode: 880-20658 Chain of Custody					
COCC No 1 of 3 COCS					
TALS Project #					
For Lab Use Only: Walk-in Client Lab Sampling					
Job / SDG No					

SSOW

Chain of Custody Record

eurofins | Environment Testing
America

Eurofins Environment Testing America

10/26/2022

Client Contact		Project Manager: J.T. Murrey		Site Contact: J.T. Murrey		Date: 10-21-22		Carrier:		COC No		2 of 3 COCs	
GHD Services		Email: jtmurray@ghd.com		Lab Contact:						TALS Project #			
2135 S Loop 250 West		Tel/Fax:		Analysis Turnaround Time		Filtered Sample (Y / N)		Perform MS / MSD (Y / N)		Sampler JTM		For Lab Use Only:	
Midland, TX 79703		☐ CALENDAR DAYS ☒ WORKING DAYS		TAT if different from Below _____		TPH 8015 - GRO/DRO/MRO		BTEX 8021		Chlorides		Walk-in Client Lab Sampling	
361-252-6136		☐ 1 day ☐ 2 days ☐ 1 week ☐ 2 weeks											
(xxx) xxx-xxxx FAX													
Project Name Outland Booster													
Site													
P O # SSOW-12594900-2022-001													

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPH 8015 - GRO/DRO/MRO	BTEX 8021	Chlorides	Sample Specific Notes
SW4	10/21/2022		C	SO	1	X	X	X			
SW5	10/21/2022		C	SO	1	X	X	X			
SW6	10/21/2022		C	SO	1	X	X	X			
SW7	10/21/2022		C	SO	1	X	X	X			
SW8	10/21/2022		C	SO	1	X	X	X			
SW9	10/21/2022		C	SO	1	X	X	X			
SW10	10/21/2022		C	SO	1	X	X	X			
SW11	10/21/2022		C	SO	1	X	X	X			
SW12	10/21/2022		C	SO	1	X	X	X			
SW13	10/21/2022		C	SO	1	X	X	X			
SW14	10/21/2022		C	SO	1	X	X	X			
SW15	10/21/2022		C	SO	1	X	X	X			

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4= HNO3, 5= NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Special Instructions/QC Requirements & Comments:

☒ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Custody Seals Intact ☐ Yes ☐ No	Custody Seal No	Cooler Temp (°C)	Obs'd	Cor'd	Therm ID No
Relinquished by: <i>[Signature]</i>	Company: <i>GHDI</i>	Date/Time: <i>10/24/22</i>	Received by: <i>[Signature]</i>	Company: <i>GHDI</i>	Date/Time: <i>10/24/22 1035</i>
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

MOSS

Chain of Custody Record

eurofins

Environment

0 Eurofins Environment Testing America

20/26/2022

Eurofins Environment Testing Americas									
COC No. 3 of 3 COCs									
TALS Project #									
Sampler JTM									
For Lab Use Only:									
Walk-in Client									
Lab Sampling									
Job / SDG No.									
Sample Specific Notes									
Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other									
Project Manager: J.T. Murrey									
Email: jtmurrey@ghd.com									
Tel/Fax:									
Analysis Turnaround Time									
☐ CALENDAR DAYS ☒ WORKING DAYS									
TAT if different from Below									
☐ 2 weeks									
☐ 1 week									
☒ 2 days									
☐ 1 day									
P.O. # S50W-12594900-2022-001									
Site									
Project Name: Outland Booster									
FAX									
(xxx) xxx-xxxx									
361-252-6136									
Midland, TX 79703									
2135 S Loop 250 West									
GHD Services									
Client Contact									
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other									
Possible Hazard Identification:									
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample									
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown									
Special Instructions/QC Requirements & Comments:									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
☐ Return to Client ☒ Disposal by Lab ☐ Archive for Months									
Custody Seats Intact ☐ Yes ☐ No									
Custody Seal No									
Relinquished by: [Signature]									
Company: GHD									
Date/Time: 10/24/22									
Received by: [Signature]									
Company:									
Received in Laboratory by:									
Company:									
Date/Time: 10/24/22-1055									

SSOW 12594900-2022-001

Chain of Custody Record

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other

20058
eurofins | Environment Testing America
Eurofins Environment Testing America

Client Contact		Project Manager: J.T. Murrey		Site Contact:		Date:		COC No: 4 of 6 COCs	
GHD Services		Email: jtmurrey@ghd.com		Lab Contact:		Carrier:		TALS Project #:	
2135 S Loop 250 West		Tel/Fax:		Analysis Turnaround Time		Filtered Sample (Y / N)		Perform MS / MSD (Y / N)	
Midland, TX 79703		☐ CALENDAR DAYS ☐ WORKING DAYS		TAT if different from Below		TPH 8015 - GRO/DRO/MRO		BTEX 8021	
361-252-6136		FAX		☐ 2 weeks		Chlorides			
(xxx) xxx-xxxx		Project Name: Outland Booster		☐ 1 week					
Site:		☒ 2 days		☐ 1 day					
P O #:									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:		
BH1A		10/21/2022		C	SO	1			
BH4A		10/21/2022		C	SO	1			
BH5A		10/21/2022		C	SO	1			
BH7A		10/21/2022		C	SO	1			
BH8A		10/21/2022		C	SO	1			
BH9A		10/21/2022		C	SO	1			
BH10A		10/21/2022		C	SO	1			
BH14A		10/21/2022		C	SO	1			
BH15A		10/21/2022		C	SO	1			
BH16A		10/21/2022		C	SO	1			
BH18A		10/21/2022		C	SO	1			
BH19A		10/21/2022		C	SO	1			
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other									
Possible Hazard Identification:									
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample									
Special Instructions/OC Requirements & Comments:									
☒ Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown									
Custody Seals intact: ☐ Yes ☐ No									
Relinquished by:		Custody Seal No		Cooler Temp. (°C) Obs'd:		Corrd		Therm ID No.	
Relinquished by:		Company:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Date/Time:	

SSOW 12594900-2022-001

Chain of Custody Record



Eurofins Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other☐☐ NPDES☐ RCRA☒ Other

 eurofins
 20658
 Eurofins E

**Environment Testing
America**

Client Contact GHD Services 2135 S Loop 250 West Midland, TX 79703 361-252-6136 (xxx) xxx-xxxx FAX Project Name: Outland Booster Site: P.O. #:		Project Manager: J.T. Murray Email: jtmurray@ghd.com Tel/Fax:		Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below:		Site Contact: Lab Contact:		Date: Carrier:		COC No: 5 of 6 COCs	
Sample Identification		Sample Date		Sample Type (C=Comp, G=Gas)		Matrix		# of Cont.		Filtered Sample (Y/N)	
BH21A		10/21/2022		C		SO		1		Perform MS / MSD (Y/N) TPH 8015 - GRO/DRO/MRO BTEX 8021 Chlorides	
BH22A		10/21/2022		C		SO		1		X X X X X X X X X X X X X X X X	
BH23A		10/21/2022		C		SO		1		X X X X X X X X X X X X X X X X	
BH24A		10/21/2022		C		SO		1		X X X X X X X X X X X X X X X X	
BH25A		10/21/2022		C		SO		1		X X X X X X X X X X X X X X X X	
BH26A		10/21/2022		C		SO		1		X X X X X X X X X X X X X X X X	
Sample Specific Notes: Loc: 880 20658											
Preservation Used: 1=Ice, 2=HC, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other											
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample											
Special Instructions/QC Requirements & Comments: ☒ Non-Hazard ☐ Biodegradable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return to Client ☒ Disposal by Lab ☐ Archive for											
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.		Company Temp. (°C) Obs'd:		Corr'd:		Therm ID No.		Months	
Relinquished by: 		Company: 		Received by: 		Company:		Date/Time:		Date/Time:	
Relinquished by:		Company:		Received by:		Company:		Date/Time:		Date/Time:	
Relinquished by:		Company:		Received in Laboratory by:		Company:		Date/Time:		Date/Time:	

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-20658-1

SDG Number: 12594900

Login Number: 20658**List Number: 1****Creator: Rodriguez, Leticia****List Source: Eurofins Midland**

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Stephen Asante-Ansong
GHD Services Inc.
11200 Richmond Ave
Suite 200
Houston, Texas 77082

Generated 12/7/2022 4:15:02 PM

JOB DESCRIPTION

Delek - Outland Booster CS
SDG NUMBER 12594900

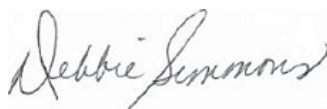
JOB NUMBER

880-21893-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland**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
12/7/2022 4:15:02 PM

Authorized for release by
Debbie Simmons, Project Manager
Debbie.Simmons@et.eurofinsus.com
(832)986-6768

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Laboratory Job ID: 880-21893-1
SDG: 12594900

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Job ID: 880-21893-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-21893-1

Comments

No additional comments.

Receipt

The sample was received on 11/22/2022 12:18 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.6° C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-40562 and analytical batch 880-40733 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-40733 recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA

Method 8015B NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40390/2-A) and (LCSD 880-40390/3-A). Evidence of matrix interferences is not obvious.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: OE-1 (880-21893-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015B NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-40410/32). Evidence of matrix interferences is not obvious.

Method 8015B NM: The method blank for preparation batch 880-40390 and analytical batch 880-40410 contained Oil Range Organics (Over C28-C36) 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 8015B NM: The laboratory control sample (LCS) associated with preparation batch 880-40390 and analytical batch 880-40410 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015B NM: CCV inadvertently spiked twice. The data has been processed and reported.

(CCV 880-40410/21) and (CCV 880-40410/32)

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

General Chemistry

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

Organic Prep

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

VOA Prep

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

Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Client Sample ID: OE-1

Lab Sample ID: 880-21893-1

Date Collected: 11/21/22 14:30

Matrix: Solid

Date Received: 11/22/22 12:18

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg	-	11/29/22 09:30	12/01/22 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	11/29/22 09:30	12/01/22 17:24	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/29/22 09:30	12/01/22 17:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00402	0.00102	mg/Kg	-		12/02/22 11:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	42.2	J	49.9	15.0	mg/Kg	-		11/29/22 12:18	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	23.5	J *	49.9	15.0	mg/Kg	-	11/28/22 09:13	11/29/22 01:06	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg	-	11/28/22 09:13	11/29/22 01:06	1
Oil Range Organics (Over C28-C36)	18.7	J B	49.9	15.0	mg/Kg	-	11/28/22 09:13	11/29/22 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	11/28/22 09:13	11/29/22 01:06	1
o-Terphenyl	146	S1+	70 - 130	11/28/22 09:13	11/29/22 01:06	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.4		5.00	0.395	mg/Kg	-		11/29/22 01:20	1

Eurofins Midland

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

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)
880-21893-1	OE-1	82	105
LCS 880-40562/1-A	Lab Control Sample	86	107
LCSD 880-40562/2-A	Lab Control Sample Dup	86	112
MB 880-40562/5-A	Method Blank	68 S1-	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-21893-1	OE-1	116	146 S1+
LCS 880-40390/2-A	Lab Control Sample	171 S1+	210 S1+
LCSD 880-40390/3-A	Lab Control Sample Dup	150 S1+	182 S1+
MB 880-40390/1-A	Method Blank	92	116

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40562/5-A

Matrix: Solid

Analysis Batch: 40733

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40562

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		11/29/22 09:30	12/01/22 11:01	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		11/29/22 09:30	12/01/22 11:01	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		11/29/22 09:30	12/01/22 11:01	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		11/29/22 09:30	12/01/22 11:01	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		11/29/22 09:30	12/01/22 11:01	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		11/29/22 09:30	12/01/22 11:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	11/29/22 09:30	12/01/22 11:01	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/29/22 09:30	12/01/22 11:01	1

Lab Sample ID: LCS 880-40562/1-A

Matrix: Solid

Analysis Batch: 40733

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40562

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07329		mg/Kg		73	70 - 130
Toluene	0.100	0.1078		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1060		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.1907		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09023		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-40562/2-A

Matrix: Solid

Analysis Batch: 40733

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40562

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1031		mg/Kg		103	70 - 130	34	35
Toluene	0.100	0.1128		mg/Kg		113	70 - 130	5	35
Ethylbenzene	0.100	0.1090		mg/Kg		109	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1878		mg/Kg		94	70 - 130	2	35
o-Xylene	0.100	0.09007		mg/Kg		90	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

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

Lab Sample ID: MB 880-40390/1-A

Matrix: Solid

Analysis Batch: 40410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		11/28/22 09:13	11/28/22 13:45	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		11/28/22 09:13	11/28/22 13:45	1
Oil Range Organics (Over C28-C36)	17.80	J	50.0	15.0	mg/Kg		11/28/22 09:13	11/28/22 13:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				11/28/22 09:13	11/28/22 13:45	1
o-Terphenyl	116		70 - 130				11/28/22 09:13	11/28/22 13:45	1

Lab Sample ID: LCS 880-40390/2-A

Matrix: Solid

Analysis Batch: 40410

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	726.7		mg/Kg		73	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	171	S1+	70 - 130				
o-Terphenyl	210	S1+	70 - 130				

Lab Sample ID: LCSD 880-40390/3-A

Matrix: Solid

Analysis Batch: 40410

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	663.0	*-	mg/Kg		66	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	877.7		mg/Kg		88	70 - 130	14	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	150	S1+	70 - 130						
o-Terphenyl	182	S1+	70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40385/1-A

Matrix: Solid

Analysis Batch: 40500

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			11/28/22 23:42	1

Eurofins Midland

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-40385/2-A

Matrix: Solid

Analysis Batch: 40500

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.1		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-40385/3-A

Matrix: Solid

Analysis Batch: 40500

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	256.7		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

GC VOA

Prep Batch: 40562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	5035	
MB 880-40562/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40562/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40562/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 40733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	8021B	40562
MB 880-40562/5-A	Method Blank	Total/NA	Solid	8021B	40562
LCS 880-40562/1-A	Lab Control Sample	Total/NA	Solid	8021B	40562
LCSD 880-40562/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40562

Analysis Batch: 40878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 40390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	8015NM Prep	
MB 880-40390/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40390/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40390/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	8015B NM	40390
MB 880-40390/1-A	Method Blank	Total/NA	Solid	8015B NM	40390
LCS 880-40390/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40390
LCSD 880-40390/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40390

Analysis Batch: 40613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Soluble	Solid	DI Leach	
MB 880-40385/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40385/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40385/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 40500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21893-1	OE-1	Soluble	Solid	300.0	40385
MB 880-40385/1-A	Method Blank	Soluble	Solid	300.0	40385
LCS 880-40385/2-A	Lab Control Sample	Soluble	Solid	300.0	40385
LCSD 880-40385/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40385

Eurofins Midland

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

Client Sample ID: OE-1

Lab Sample ID: 880-21893-1

Date Collected: 11/21/22 14:30

Matrix: Solid

Date Received: 11/22/22 12:18

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	40562	11/29/22 09:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40733	12/01/22 17:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40878	12/02/22 11:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			40613	11/29/22 12:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40390	11/28/22 09:13	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40410	11/29/22 01:06	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40385	11/28/22 08:50	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40500	11/29/22 01:20	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

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

Method Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

Job ID: 880-21893-1
SDG: 12594900

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

Eurofins Midland

Sample Summary

Client: GHD Services Inc.
Project/Site: Delek - Outland Booster CS

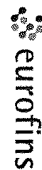
Job ID: 880-21893-1
SDG: 12594900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-21893-1	OE-1	Solid	11/21/22 14:30	11/22/22 12:18

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

SSOW SSOW-12594900-2022-001

Chain of Custody Record



Environment Testing America

[illegible]

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 880-21893-1

SDG Number: 12594900

Login Number: 21893**List Number: 1****Creator: Rodriguez, Leticia****List Source: Eurofins Midland**

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

Attachment C

Photographic Log

Site Photographs



Photo 1 **View Looking East - Remedial Over-Excavation.**



Photo 2 **View Looking North - Remedial Over-Excavation.**



Photo 3 View Looking North - Remedial Over-Excavation.



Photo 4 View Looking South - Remedial Over-Excavation.



Photo 5 View Looking South - Remedial Over-Excavation.



Photo 6 View Looking South - Remedial Over-Excavation - Material Pending Removal.



Photo 7 Remedial Over-Excavation - Material Pending Removal.



Photo 8 View Looking South - Excavation.



Photo 9 View Looking South - Excavation.

Attachment D

Sampling Notifications

From: [Nobui, Jennifer, EMNRD](#)
To: [J.T. Murrey](#)
Cc: [Bratcher, Michael, EMNRD](#)
Subject: FW: [EXTERNAL] Sampling Notification - nAPP2228544924
Date: Monday, October 24, 2022 10:07:17 AM

You don't often get email from jennifer.nobui@emnrd.nm.gov. [Learn why this is important](#)

JT

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Tuesday, October 18, 2022 3:22 PM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Sampling Notification - nAPP2228544924

Jocelyn Harimon • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@state.nm.us
<http://www.emnrd.nm.gov>



From: J.T. Murrey <JT.Murrey@ghd.com>
Sent: Tuesday, October 18, 2022 1:59 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Cassie Whitefield <Cassie.Whitefield@deleklogistics.com>; Stephen Asante-Ansong <Stephen.Asante-Ansong@ghd.com>
Subject: [EXTERNAL] Sampling Notification - nAPP2228544924

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom it May Concern,

GHD on behalf of Delek Logistics, respectfully submits notification of sampling to be conducted at the below location:

Delek - Outland Booster Station
nAPP2228544924
Release Date: 9-14-22
C - 25-22S-34E
Lea County

Sampling will begin at 11:00 a.m. on Friday, October 21, 2022.

Thanks

J.T. Murrey
Program Director

GHD
Proudly employee-owned | ghd.com
1712 S. Staples St., Corpus Christi, Texas 78404
D1 361 232 4280 | M361 252 6136 | Ejt.murrey@ghd.com

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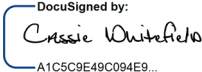


Certificate Of Completion

Envelope Id: 234A4EF67BC9441BBB3E9CACDDCA57BE		Status: Completed
Subject: Here is your signed document: 12594900-LTR-NMOCD-1 - Complete Draft - Site Closure Report (003).pdf		
Source Envelope:		
Document Pages: 233	Signatures: 2	Envelope Originator:
Certificate Pages: 1	Initials: 0	Cassie Whitefield
AutoNav: Disabled		7102 Commerce Way
Envelopeld Stamping: Disabled		Brentwood, TN 37027
Time Zone: (UTC-06:00) Central Time (US & Canada)		Cassie.Whitefield@deleklogistics.com
		IP Address: 198.245.44.140

Record Tracking

Status: Original	Holder: Cassie Whitefield	Location: DocuSign
2/17/2023 12:05:13 PM	Cassie.Whitefield@deleklogistics.com	

Signer Events	Signature	Timestamp
Cassie Whitefield Cassie.Whitefield@deleklogistics.com Sr. EHS Manager Delek US Holdings, Inc. Security Level: Email, Account Authentication (None)	DocuSigned by:  A1C5C9E49C094E9... Signature Adoption: Pre-selected Style Using IP Address: 198.245.44.140	Sent: 2/17/2023 12:08:01 PM Viewed: 2/17/2023 12:08:29 PM Signed: 2/17/2023 12:11:21 PM Freeform Signing

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

In Person Signer Events	Signature	Timestamp
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Editor Delivery Events	Status	Timestamp
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Agent Delivery Events	Status	Timestamp
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Intermediary Delivery Events	Status	Timestamp
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Certified Delivery Events	Status	Timestamp
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Carbon Copy Events	Status	Timestamp
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Stephen.Asante-Ansong@ghd.com Security Level: Email, Account Authentication (None)	COPIED	Sent: 2/17/2023 12:11:24 PM Viewed: 2/17/2023 1:29:03 PM
Electronic Record and Signature Disclosure: Not Offered via DocuSign		

Witness Events	Signature	Timestamp
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Notary Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
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Envelope Sent	Hashed/Encrypted	2/17/2023 12:08:01 PM
Certified Delivered	Security Checked	2/17/2023 12:08:29 PM
Signing Complete	Security Checked	2/17/2023 12:11:21 PM
Completed	Security Checked	2/17/2023 12:11:24 PM

Payment Events	Status	Timestamps
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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 180553

CONDITIONS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 180553
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	2/17/2023