District I
1625 N. French Dr., Hobbs, NM 88240
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District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
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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

QUESTIONS

Action 135707

QUESTIONS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 135707
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source *Please answer all of the questions in this group.*	
Site Name	McElvain Pad 30
Date Release Discovered	08/18/2022
Surface Owner	Federal

Incident Details *Please answer all of the questions in this group.*	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Fitting | Produced Water | Released: 50 BBL | Recovered: 0 BBL | Lost: 50 BBL]
Is the concentration of dissolved chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 135707
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by 19.15.29.7(A) NMAC	**Yes, major release.**
Reasons why this would be considered a submission for a notification of a major release	• Unauthorized release of a volume, excluding gases, of 25 barrels or more
If YES, was immediate notice given to the OCD, by whom	Cassie Whitefield
If YES, was immediate notice given to the OCD, to whom	Mike Bratcher
If YES, was immediate notice given to the OCD, when	08/18/2022
If YES, was immediate notice given to the OCD, by what means (phone, email, etc.)	Phone
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
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 prepare and attach a narrative of actions to date in the follow-up C-141 submission. 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 prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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ACKNOWLEDGMENTS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 135707
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

☑	I acknowledge that I am authorized to submit notification of a releases on behalf of my operator.
☑	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
☑	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
☑	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.
☑	I acknowledge the fact that 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.
☑	I acknowledge the fact that, 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.

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

CONDITIONS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 135707
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
cassiewhitefield	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	8/18/2022

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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	NAPP2223063600
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 32.711667 Longitude -103.593944
(NAD 83 in decimal degrees to 5 decimal places)

Site Name McElvain	Site Type LACT
Date Release Discovered 8/18/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	30	18S	34E	Lea

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☑ Produced Water	Volume Released (bbls) 60	Volume Recovered (bbls) 0
	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

Corrosion

Form C-141 State of New Mexico
Page 2 Oil Conservation Division

Incident ID	NAPP2223063600
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Volume of the release is greater than 25 barrels

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 August 18, 2022. Notice also reported via OCD portal.

Initial Response

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

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

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

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

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

Printed Name: Cassie Whitefield Title: SR EHS Manager

Signature: Date: 11/30/22

email: cassie.whitefield@deleklogistics.com Telephone: 870-310-9078

OCD Only

Received by: Jocelyn Harimon Date: 09/2/2022

Jocelyn Harimon 09/2/2022

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	UNK (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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Cassie Whitefield Title: SR EHS Manger

Signature: [signature] Date: 11/30/22

email: Cassie.whitefield@delekLogistics.com Telephone: 870-310-9078

OCD Only

Received by: Jocelyn Harimon Date: 12/01/2022

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2223063600
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: Cassie Whitefield Title: SR EHS Manager

Signature: Cer Date: 11/30/22

email: Cassie.Whitefield@delekLogistics.com Telephone: 870-310-9019

OCD Only

Received by: Jocelyn Harimon Date: 12/01/2022

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

Signature: Jennifer Nobui Date: 01/04/2023

Incident ID	NAPP2223063600
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 140312

CONDITIONS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 140312
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	9/2/2022

6121 Indian School Road NE, Suite 200
Albuquerque, New Mexico 87110
United States
www.GHD.com

Our Ref.: 12592305-NMOCD-1

November 30, 2022

New Mexico Oil Conservation Division
District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Site Characterization and Delineation Work Plan
Delek McElvain LACT Release Site
Delek Logistics
Incident Identification: nAPP2223063600
P-30-18S-34E, Lea County, New Mexico

Dear Sir or Madam:

1. Introduction

GHD Services Inc. (GHD), on behalf of Delek Logistics Companies (Delek), submits this Site Characterization and Delineation Work Plan to the New Mexico Oil Conservation Division (NMOCD) District 4 Office. This Report provides documentation of delineation, sampling, and analyses in the affected area at the Delek McElvain LACT Release Site (Site). The Site is located in Unit Letter P Section 30 of Township 18 South and Range 34 East in Lea County, New Mexico. The Global Positioning System (GPS) coordinates for the release Site are 32.711667 N latitude and 103.593944 W longitude. The release occurred on federal land owned by Bureau of Land Management (BLM). Figure 1 depicts the Site location. Other Site details are depicted on Figure 2, Site Assessment: Soil Analytical Results Map.

2. Background Information

A C-141, Release Notification, for this release was submitted to the NMOCD on September 1, 2022. The C-141 form stated that 60 barrels of produced water was released on August 18, 2022. Pieces of equipment within the LACT unit appeared to be corroded leading to equipment failure and ultimately a release. After discussions between field personnel and environmental staff, Delek made the decision to file a C-141 form for this release location.

The release falls under the jurisdiction of the NMOCD District 1 Office in Hobbs, New Mexico. The NMOCD assigned the release with Incident Number nAPP2223063600. The Release Notification and Site Assessment/Characterization 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 1, Closure Criteria for Soils Impacted by a Release, 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 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 one-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. The Site characterization documentation (Karst Potential, Federal Emergency Management Agency (FEMA), Points of Diversion, and Wetlands maps) are provided in Attachment A. The soil and closure criteria are listed below.

General Site Characterization and Groundwater

Site Characterization	Average Groundwater Depth (feet)
No Receptors Found	Unknown, Treated as <50 feet

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

4. Excavation, Waste Management and Confirmation Sampling

Upon discovery of the release Delek initiated immediate excavation activities. On August 25, 2022, GHD mobilized to the Site and collected soil samples at depths ranging from surface to six (6) feet below ground surface (bgs). All soil samples were analyzed for benzene, toluene, ethylbenzene, and xylene (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 Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico.

Seven (7) of the twelve (12) test pits had samples exceeding applicable NMAC Table 3.1 Closure Criteria for groundwater less than fifty (50) feet: South Center, North Center - Bottom 6' - West Wall Wide, North Center - West Wall Wide, North Center - East Wall Wide, North East Wall, North West Wall, and North Bottom. Figure 2, Site Assessment: Soil Analytical Results Map, depicts the locations of the initial delineation samples and analytical concentrations. Analytical results are provided in Table 1, on Figure 2, and in the Laboratory Analytical Reports provided in Attachment B.

Due to the initial soil sampling activities exhibiting chloride concentrations above NMAC 19.15.29.12 Closure Criteria, GHD and Frontier Development mobilized to the site on September 19, 2022, to further excavate the affected soils.

On September 21 through 22, 2022, two (2) wall (North East Wall and North West Wall) and seven (7) bottom (North Bottom 1-8) soil samples were collected, as shown on Figure 2. All soil samples were taken to HEAL in Albuquerque, New Mexico and analyzed for BTEX by EPA Method 8021B, TPH by Method 8015B Modified, and chloride by EPA Method 300. Analytical and field screening results indicated one (1) wall and

seven (7) bottom confirmation samples exhibited chloride concentrations above NMAC 19.15.29.12 Closure Criteria. Analytical and field screening results for soil samples are provided in Table 2 and in the Laboratory Analytical Reports provided in Attachment C.

5. nAPP2223063600 Proposed Work Plan

Since vertical delineation of chlorides has not been achieved on the north end of the excavation, GHD proposes to advance a soil boring to collect delineation samples beyond the current excavation depth of 20 feet bgs. Additionally, no groundwater data could be located within one half mile from the Site so the boring will also be used to verify depth to groundwater in the vicinity of the Site. GHD and a New Mexico licensed drilling company will attempt to return to the Site during December 2022, with an air rotary drilling rig to advance the soil boring at the following GPS Coordinates, 32.711852 N latitude and 103.594663 W longitude. The soil boring will be drilled until groundwater is encountered or to a total depth of 105 feet bgs and will be left open for 72 hours to determine the presence or absence of groundwater by utilization of a water level meter. If groundwater is detected at fifty-one (51) feet or greater the closure criteria for this Site will change accordingly with NMAC 19.15.29.12 Table 1.

Following the evaluation of depth to groundwater water and any associated changes in closure standards based on the determined depth to groundwater, closure sampling will be performed at the Site to meet the established closure criteria. Notification of closure sampling will be provided to the NMOCD at least 48 hours prior to the initiation of sampling.

Any impacted soil beyond a depth of 20 feet bgs will be left in place due to excavation equipment limitations and safety concerns with the adjacent tank battery. The excavation will be backfilled to a depth of 4 feet bgs at which point a (20) millimeter polyethylene liner will be placed over top of any remaining chloride impacts prior to completing backfill to surface. The placed liner will help impede further migration of chlorides in the vadose zone.

Details of Site activities and data collected during the proposed work will be compiled and summarized in a closure report that will be submitted to the NMOCD in accordance with closure reporting requirements.

If you have any questions or comments concerning this Site Characterization and delineation Work Plan, please do not hesitate to contact our GHD - Albuquerque office at (505) 200-3210.

Sincerely,

GHD

Christine Mathews
Project Manager

Adrianna Copeland
Graduate Engineer

CM/jlf/1

Encl.: Table 1 - Summary of Soil Analytical Data
Figure 1 - Site Location Map
Figure 2 - Site Assessment: Soil Analytical Results Map
Attachment A - Site Characterization Documentation
Attachment B - Laboratory Analytical Reports and Chain-of-Custody Documentation - Hall Environmental Analysis Laboratory
Attachment C - Laboratory Analytical Reports and Chain-of-Custody Documentation - Eurofins

Table 1

Summary of Prelim Soil Analytical Data
Delek McElvain

Sample Identification	Sample Date	Depth (feet bgs)	Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX	TPH				Chloride (Lab)	Chloride (Field Screening)
								GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C35)	Total GRO/DRO/MRO		
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			Table I Closure Criteria for Soils <50 feet Depth to Groundwater 19.15.29 NMAC										
			10 mg/kg	---	---	---	50 mg/kg	---	---	---	100 mg/kg	600 mg/kg	600 mg/kg
Initial Assessment Samples													
South Bottom	8/25/22	Surface	< 0.023	< 0.047	< 0.047	< 0.093	< 0.093	< 4.7	< 13	< 44	< 44	**170**	**188**
South West Wall	8/25/22	Surface	< 0.023	< 0.047	< 0.047	< 0.093	< 0.093	< 4.7	< 14	< 48	< 48	< 60	< 45
South East Wall	8/25/22	Surface	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	< 4.8	< 14	< 47	< 47	< 60	< 45
South Center - Bottom 6'	8/25/22	6'	< 0.024	< 0.048	< 0.048	< 0.096	< 0.096	< 4.8	< 13	< 44	< 44	< 60	< 45
South Center - East Wall	8/25/22	3.5'	< 0.023	< 0.046	< 0.046	< 0.092	< 0.092	< 4.6	< 15	< 49	< 49	< 61	< 45
South Center - West Wall Wide	8/25/22	4'	< 0.024	< 0.048	< 0.048	< 0.095	< 0.095	< 4.8	< 14	< 46	< 46	< 59	**17312**
North Center - Bottom 6'	8/25/22	6'	< 0.024	< 0.049	< 0.049	< 0.098	< 0.098	< 4.9	< 14	< 48	< 48	**930**	**260**
North Center - West Wall Wide	8/25/22	Surface	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	< 4.8	< 15	< 49	< 49	< 60	**2400**
North Center - East Wall Wide	8/25/22	Surface	< 0.024	< 0.047	< 0.047	< 0.095	< 0.095	< 4.7	< 15	< 50	< 50	< 60	**24580**
North Bottom	8/25/22	Surface	< 0.024	< 0.048	< 0.048	< 0.097	< 0.097	< 4.8	< 13	< 44	< 44	**17000**	**1772**
North Bottom (2)	9/21/22	5'	–	–	–	–	–	–	–	–	–	–	**4850**
North Bottom (3)	9/21/22	7'	–	–	–	–	–	–	–	–	–	–	**8930**
North Bottom (4)	9/21/22	9'	–	–	–	–	–	–	–	–	–	–	**940**
North Bottom (5)	9/21/22	11'	–	–	–	–	–	–	–	–	–	–	**11090**
North Bottom (6)	9/21/22	15'	–	–	–	–	–	–	–	–	–	–	**8430**
North Bottom (7)	9/21/22	20'	–	–	–	–	–	–	–	–	–	–	**8660**
North Bottom (8)	9/22/22	25'	–	–	–	–	–	–	–	–	–	–	**4880**
North East Wall	8/25/22	Surface	< 0.023	< 0.046	< 0.046	< 0.091	< 0.091	< 4.6	< 15	< 50	< 50	**10000**	
North East Wall (2)	9/21/22	5'	–	–	–	–	–	–	–	–	–	–	**7980**
North West Wall	8/25/22	Surface	< 0.024	< 0.047	< 0.047	< 0.094	< 0.094	< 4.7	< 14	< 45	< 45	**21000**	< 45
North West Wall (2)	9/21/22	0'-6'	–	–	–	–	–	–	–	–	–	–	150

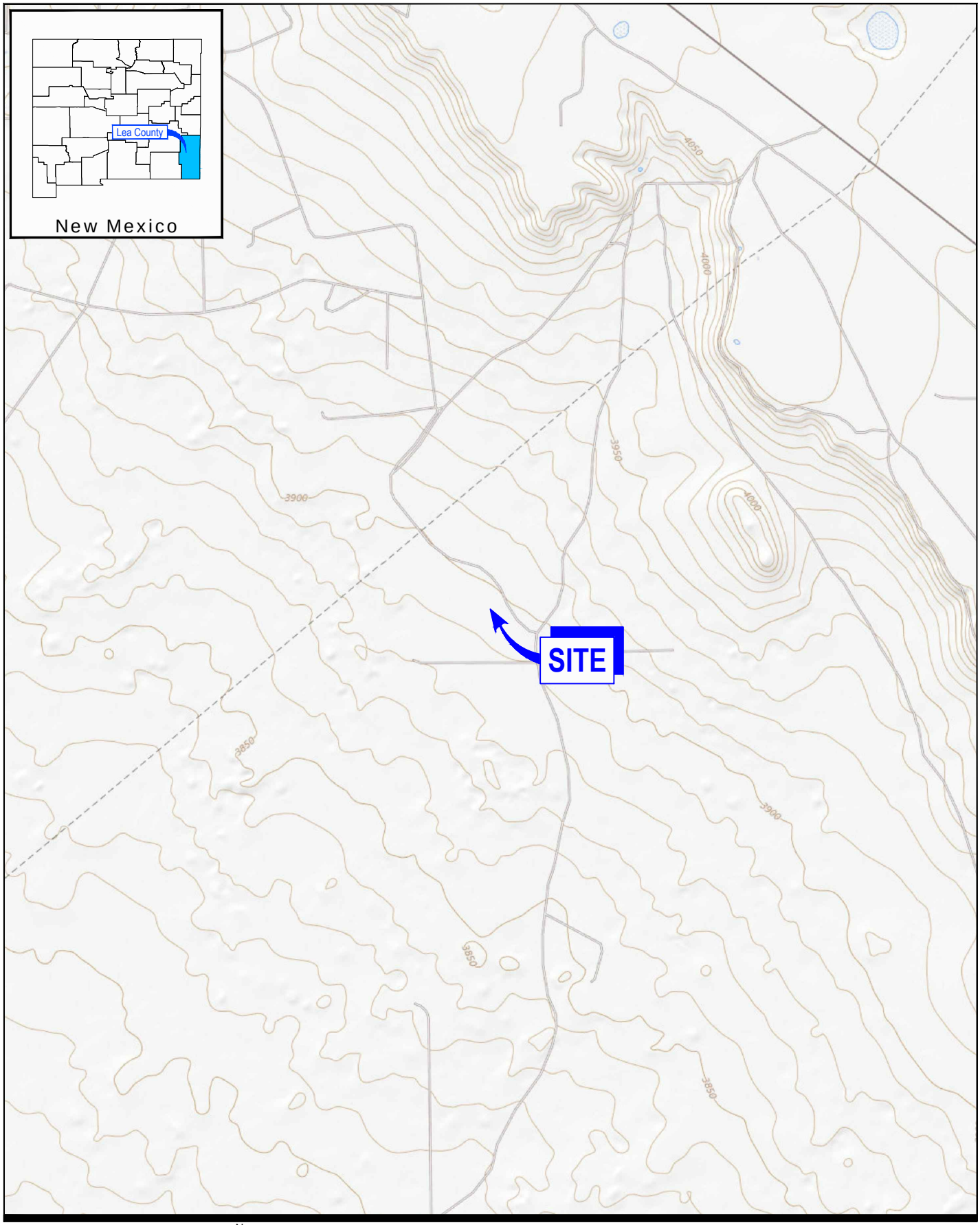
Notes:

1. Values reported in milligrams per kilogram (mg/kg).
2. < = Value Less than Reporting Limit (RL)
3. Bold Indicates Analyte Detected.
4. Benzene, toluene, ethylbenzene, and xylene (BTEX) analyses by the United States Environmental Protection Agency (EPA) Method SW 8021B.

~~B-BH 2~~ Sample Point Excavated

ft bgs = feet below ground surface

5. Total Petroleum Hydrocarbons (TPH) analyses by EPA Method SW 8015 Mod.
6. GRO/DRO/MRO = Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the New Mexico Oil Conservation Division (NMOCD) 19.15.29.12 Table 1 Closure Criteria for the Site.
8. J - the target analytes was positively identified below the quantitation limit and above the detection limit.



0 1000 2000 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

DELEK LOGISTICS PARTNERS, L.P.
LEA COUNTY, NEW MEXICO
McELVAIN

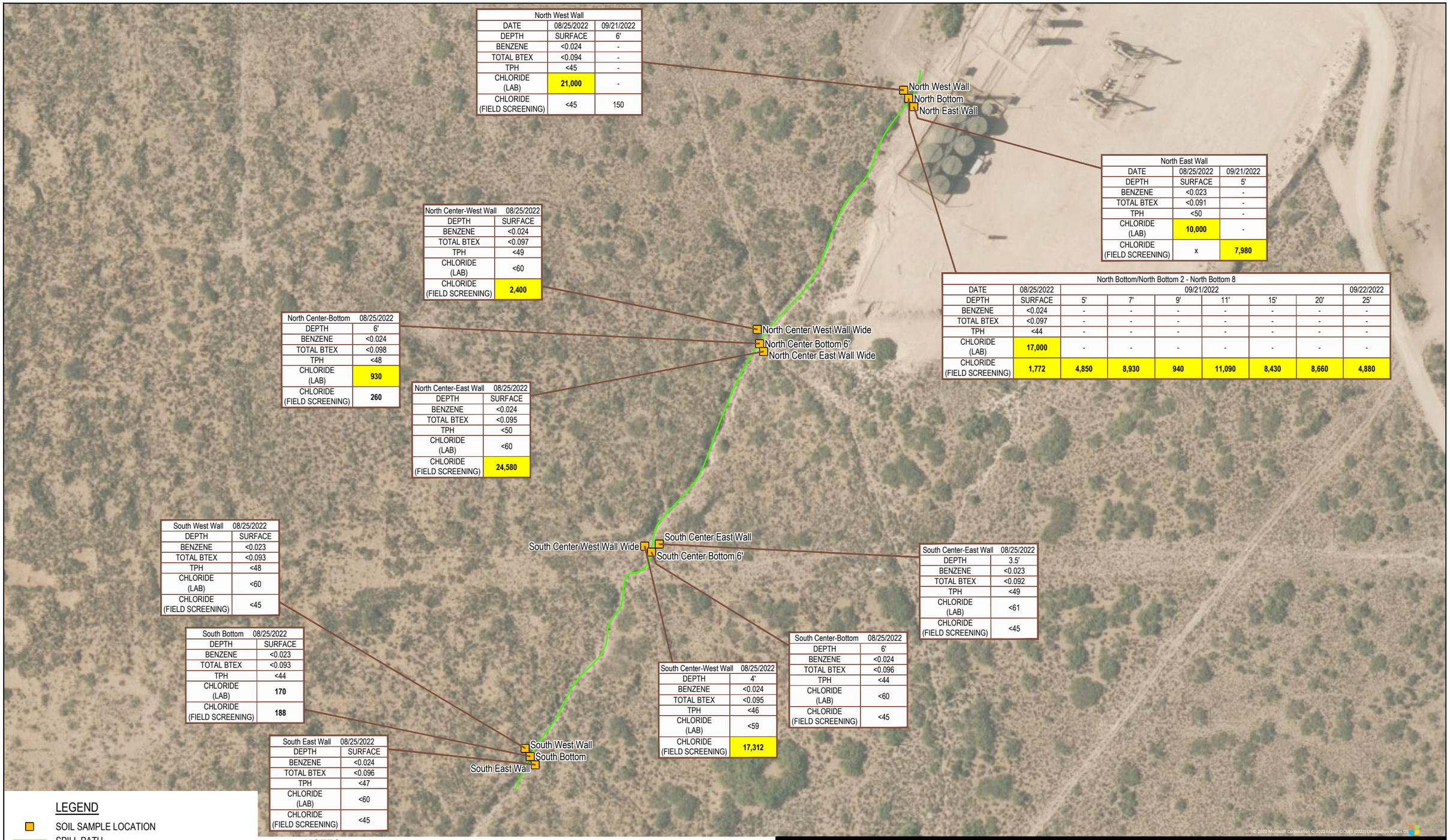
Project No. **12592305**
Date **October 2022**

SITE LOCATION MAP

FIGURE 1

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12592305\Digital_Design\ACAD\Figures\RPT001\12592305-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plotted: [illegible] 12:54 PM

Data Source: USGS 7.5 Minute Quad "Ironhouse Well and Laguna Gatuna NW, New Mexico"
Lat/Long: 32.711667° North, 103.593944° West



North West Wall		
DATE	08/25/2022	09/21/2022
DEPTH	SURFACE	6'
BENZENE	<0.024	-
TOTAL BTEX	<0.094	-
TPH	<45	-
CHLORIDE (LAB)	**21,000**	-
CHLORIDE (FIELD SCREENING)	<45	150

North East Wall		
DATE	08/25/2022	09/21/2022
DEPTH	SURFACE	5'
BENZENE	<0.023	-
TOTAL BTEX	<0.091	-
TPH	<50	-
CHLORIDE (LAB)	**10,000**	-
CHLORIDE (FIELD SCREENING)	x	**7,980**

North Bottom/North Bottom 2 - North Bottom 8								
DATE	08/25/2022	09/21/2022						09/22/2022
DEPTH	SURFACE	5'	7'	9'	11'	15'	20'	25'
BENZENE	<0.024	-	-	-	-	-	-	-
TOTAL BTEX	<0.097	-	-	-	-	-	-	-
TPH	<44	-	-	-	-	-	-	-
CHLORIDE (LAB)	**17,000**	-	-	-	-	-	-	-
CHLORIDE (FIELD SCREENING)	**1,772**	**4,850**	**8,930**	**940**	**11,090**	**8,430**	**8,660**	**4,880**

North Center-West Wall	08/25/2022
DEPTH	SURFACE
BENZENE	<0.024
TOTAL BTEX	<0.097
TPH	<49
CHLORIDE (LAB)	<60
CHLORIDE (FIELD SCREENING)	**2,400**

North Center-Bottom	08/25/2022
DEPTH	6'
BENZENE	<0.024
TOTAL BTEX	<0.098
TPH	<48
CHLORIDE (LAB)	**930**
CHLORIDE (FIELD SCREENING)	**260**

North Center-East Wall	08/25/2022
DEPTH	SURFACE
BENZENE	<0.024
TOTAL BTEX	<0.095
TPH	<50
CHLORIDE (LAB)	<60
CHLORIDE (FIELD SCREENING)	**24,580**

South West Wall	08/25/2022
DEPTH	SURFACE
BENZENE	<0.023
TOTAL BTEX	<0.093
TPH	<48
CHLORIDE (LAB)	<60
CHLORIDE (FIELD SCREENING)	<45

South Bottom	08/25/2022
DEPTH	SURFACE
BENZENE	<0.023
TOTAL BTEX	<0.093
TPH	<44
CHLORIDE (LAB)	**170**
CHLORIDE (FIELD SCREENING)	**188**

South East Wall	08/25/2022
DEPTH	SURFACE
BENZENE	<0.024
TOTAL BTEX	<0.096
TPH	<47
CHLORIDE (LAB)	<60
CHLORIDE (FIELD SCREENING)	<45

South Center-West Wall	08/25/2022
DEPTH	4'
BENZENE	<0.024
TOTAL BTEX	<0.095
TPH	<46
CHLORIDE (LAB)	<59
CHLORIDE (FIELD SCREENING)	**17,312**

South Center-Bottom	08/25/2022
DEPTH	6'
BENZENE	<0.024
TOTAL BTEX	<0.096
TPH	<44
CHLORIDE (LAB)	<60
CHLORIDE (FIELD SCREENING)	<45

South Center-East Wall	08/25/2022
DEPTH	3.5'
BENZENE	<0.023
TOTAL BTEX	<0.092
TPH	<49
CHLORIDE (LAB)	<61
CHLORIDE (FIELD SCREENING)	<45

LEGEND

- SOIL SAMPLE LOCATION
- SPILL PATH
- DEPTH — DEPTH OF SAMPLE (FT)
- BTEX — BENZENE, TOLUENE, ETHYLBENZENE & XYLENES CONCENTRATION (MG/KG)
- TPH — TOTAL PETROLEUM HYDROCARBONS CONCENTRATION (MG/KG)
- < — VALUE LESS THAN REPORTING LIMIT

NOTES:

1. VALUES REPORTED IN MILLIGRAMS PER KILOGRAMS (mg/kg).
2. BOLD INDICATES ANALYTE DETECTED.
3. YELLOW SHADED CELLS INDICATE ANALYTICAL SAMPLES THAT EXCEED THE NMOC 19.15.29.12 TABLE 1.

0 50 100 ft

Coordinate System:
NAD 1983 (2011) StatePlane-
New Mexico East (US Feet)

N

GHD

DELEK LOGISTICS PARTNERS, L.P.
LEA COUNTY, NEW MEXICO
McELVAIN

SITE DETAILS MAP

Project No. **12592305**
Date **October 2022**

FIGURE 2

Filename: \\ghdnet\ghd\US\Albuquerque\Projects\562\12592305\Digital_Design\ACAD\Figures\RPT001\12592305-GHD-00-00-RPT-EN-D101_DL-001.dwg
Plot Date: 19 October 2022 12:40 PM

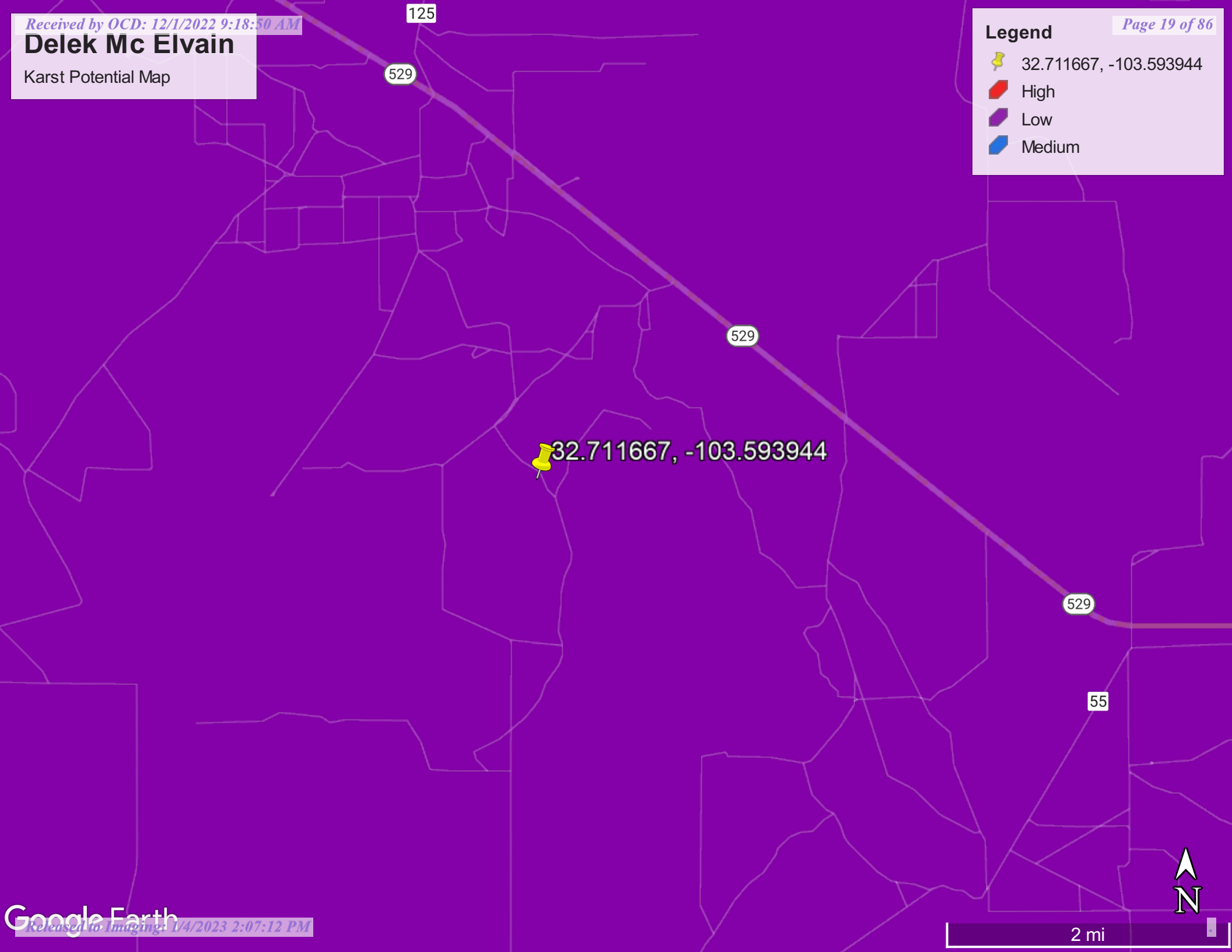
Data Source: Microsoft Product Screen shot(s) Reprinted with permission from Microsoft Corporation
Lat/Long: 32.711667° North, 103.593944° West

Attachment A

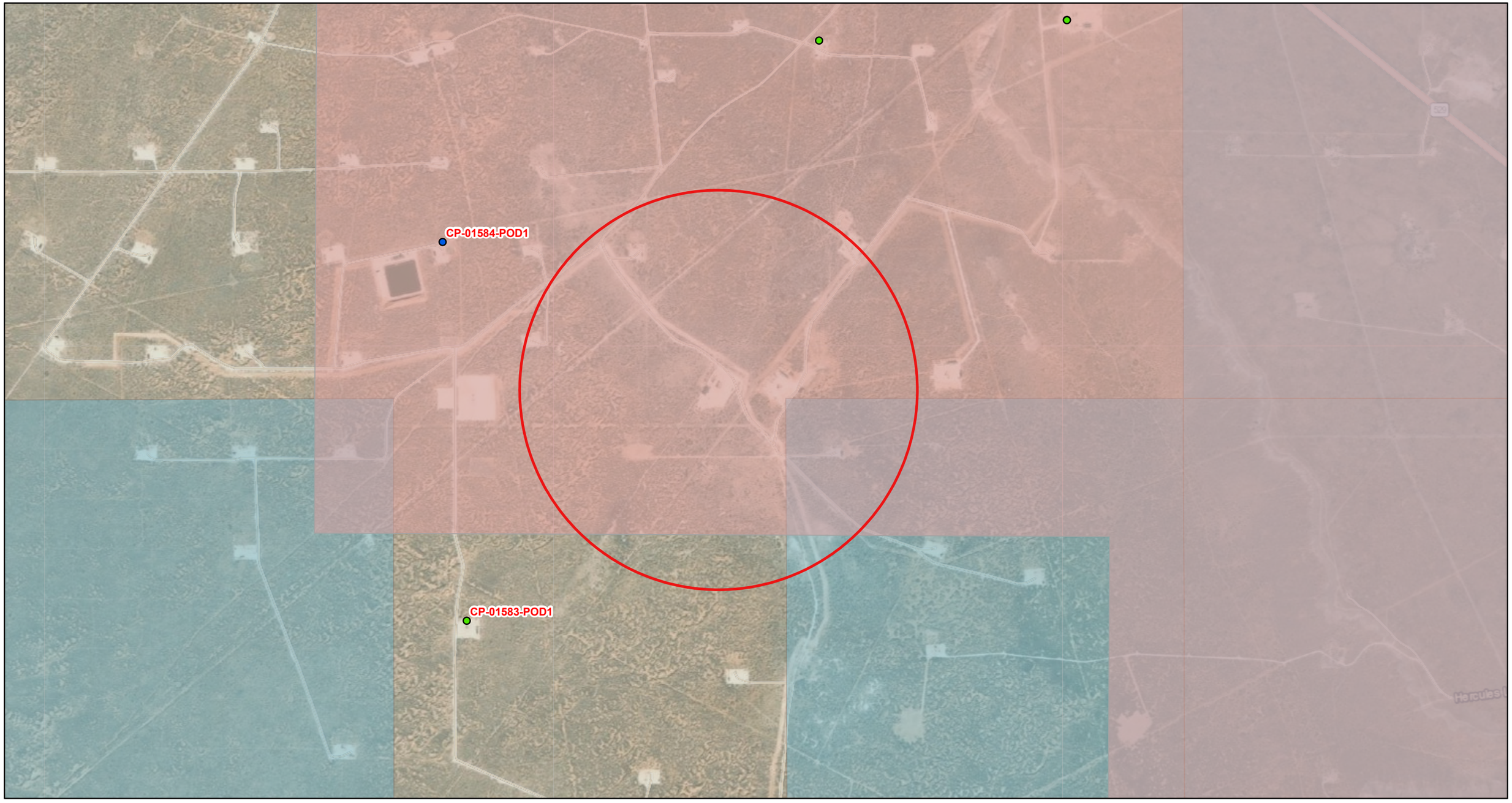
Site Characterization Documentation

Delek Mc Elvain

Karst Potential Map



OSE POD Locations Map



8/29/2022, 1:15:00 PM

Override 1
GIS WATERS PODs
Active
Pending
OSE District Boundary
Water Right Regulations
Critical Management Area - Guidelines
Closure Area
New Mexico State Trust Lands
Both Estates
SiteBoundaries

1:18,056

0 0.17 0.35 0.7 mi

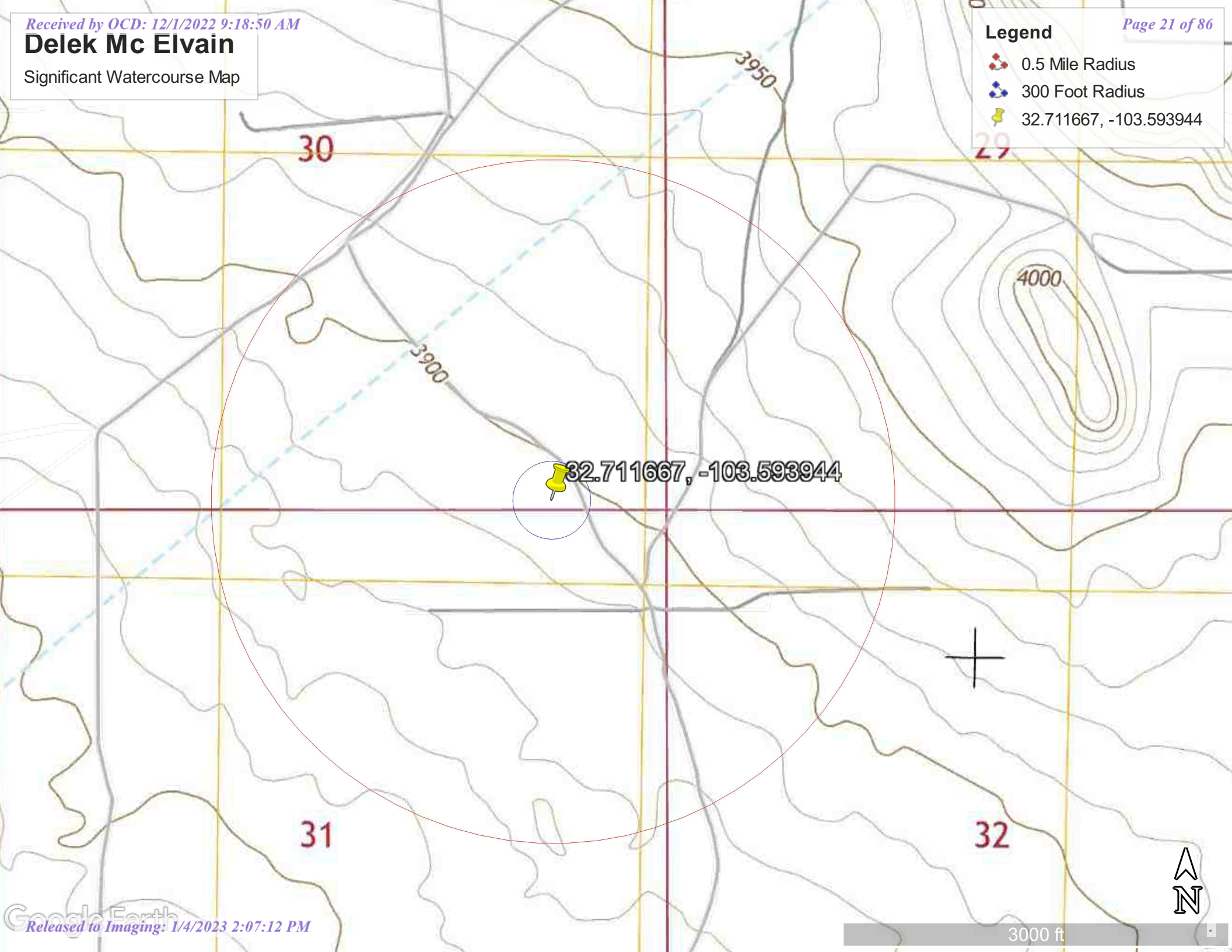
0 0.3 0.6 1.2 km

Esri, HERE, GeoTechnologies, Inc., Esri, HERE, Garmin, GeoTechnologies, Inc., U.S. Department of Energy Office of Legacy Management, Maxar

Web Generated Map
Map is generated by web users.

Delek Mc Elvain

Significant Watercourse Map



U.S. Fish and Wildlife Service
National Wetlands Inventory

Delek Mc Elvain - Wetlands Map

August 19, 2022

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.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

National Flood Hazard Layer FIRMette

FEMA

103°35'57"W 32°42'57"N

103°35'19"W 32°42'27"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

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 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- 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

N

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 8/19/2022 at 12:08 PM 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.

Attachment B

Laboratory Analytical Reports and Chain-of-Custody Documentation - Hall Environmental Analysis Laboratory

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 02, 2022

Christine Mathews
GHD
6121 Indian School Road, NE #200
Albuquerque, NM 87110
TEL: (505) 884-0672
FAX

RE: Mc Elvain OrderNo.: 2208G95

Dear Christine Mathews:

Hall Environmental Analysis Laboratory received 12 sample(s) on 8/27/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South Bottom
Project: Mc Elvain
Collection Date: 8/25/2022 2:00:00 PM
Lab ID: 2208G95-001 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	170	60		mg/Kg	20	8/30/2022 1:01:27 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/30/2022 11:44:27 AM	69837
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/30/2022 11:44:27 AM	69837
Surr: DNOP	114	21-129		%Rec	1	8/30/2022 11:44:27 AM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2022 10:12:00 AM	69822
Surr: BFB	97.9	37.7-212		%Rec	1	8/30/2022 10:12:00 AM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	8/30/2022 10:12:00 AM	69822
Toluene	ND	0.047		mg/Kg	1	8/30/2022 10:12:00 AM	69822
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2022 10:12:00 AM	69822
Xylenes, Total	ND	0.093		mg/Kg	1	8/30/2022 10:12:00 AM	69822
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	8/30/2022 10:12:00 AM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South West Wall
Project: Mc Elvain
Collection Date: 8/25/2022 2:05:00 PM
Lab ID: 2208G95-002 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 2:03:10 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/30/2022 12:52:50 PM	69837
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/30/2022 12:52:50 PM	69837
Surr: DNOP	115	21-129		%Rec	1	8/30/2022 12:52:50 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2022 11:11:00 AM	69822
Surr: BFB	93.2	37.7-212		%Rec	1	8/30/2022 11:11:00 AM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	8/30/2022 11:11:00 AM	69822
Toluene	ND	0.047		mg/Kg	1	8/30/2022 11:11:00 AM	69822
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2022 11:11:00 AM	69822
Xylenes, Total	ND	0.093		mg/Kg	1	8/30/2022 11:11:00 AM	69822
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	8/30/2022 11:11:00 AM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South East Wall
Project: Mc Elvain
Collection Date: 8/25/2022 2:10:00 PM
Lab ID: 2208G95-003 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 2:15:31 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/30/2022 1:03:24 PM	69837
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/30/2022 1:03:24 PM	69837
Surr: DNOP	123	21-129		%Rec	1	8/30/2022 1:03:24 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2022 11:31:00 AM	69822
Surr: BFB	91.6	37.7-212		%Rec	1	8/30/2022 11:31:00 AM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 11:31:00 AM	69822
Toluene	ND	0.048		mg/Kg	1	8/30/2022 11:31:00 AM	69822
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2022 11:31:00 AM	69822
Xylenes, Total	ND	0.096		mg/Kg	1	8/30/2022 11:31:00 AM	69822
Surr: 4-Bromofluorobenzene	88.2	70-130		%Rec	1	8/30/2022 11:31:00 AM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South Center Bottom 6'
Project: Mc Elvain
Collection Date: 8/25/2022 2:30:00 PM
Lab ID: 2208G95-004 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/30/2022 2:27:52 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/30/2022 1:13:57 PM	69837
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/30/2022 1:13:57 PM	69837
Surr: DNOP	98.3	21-129		%Rec	1	8/30/2022 1:13:57 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2022 11:50:00 AM	69822
Surr: BFB	97.4	37.7-212		%Rec	1	8/30/2022 11:50:00 AM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 11:50:00 AM	69822
Toluene	ND	0.048		mg/Kg	1	8/30/2022 11:50:00 AM	69822
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2022 11:50:00 AM	69822
Xylenes, Total	ND	0.096		mg/Kg	1	8/30/2022 11:50:00 AM	69822
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	8/30/2022 11:50:00 AM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South Center East Wall
Project: Mc Elvain
Collection Date: 8/25/2022 2:35:00 PM
Lab ID: 2208G95-005 **Matrix:** SOIL
Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	61		mg/Kg	20	8/30/2022 2:40:13 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/30/2022 1:24:32 PM	69837
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/30/2022 1:24:32 PM	69837
Surr: DNOP	103	21-129		%Rec	1	8/30/2022 1:24:32 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/30/2022 12:10:00 PM	69822
Surr: BFB	95.7	37.7-212		%Rec	1	8/30/2022 12:10:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	8/30/2022 12:10:00 PM	69822
Toluene	ND	0.046		mg/Kg	1	8/30/2022 12:10:00 PM	69822
Ethylbenzene	ND	0.046		mg/Kg	1	8/30/2022 12:10:00 PM	69822
Xylenes, Total	ND	0.092		mg/Kg	1	8/30/2022 12:10:00 PM	69822
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	8/30/2022 12:10:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: South Center Westwall Wide
Project: Mc Elvain
Collection Date: 8/25/2022 2:40:00 PM
Lab ID: 2208G95-006 **Matrix:** SOIL
Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	59		mg/Kg	20	8/30/2022 2:52:34 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/30/2022 1:35:07 PM	69837
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/30/2022 1:35:07 PM	69837
Surr: DNOP	110	21-129		%Rec	1	8/30/2022 1:35:07 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2022 12:30:00 PM	69822
Surr: BFB	97.2	37.7-212		%Rec	1	8/30/2022 12:30:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 12:30:00 PM	69822
Toluene	ND	0.048		mg/Kg	1	8/30/2022 12:30:00 PM	69822
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2022 12:30:00 PM	69822
Xylenes, Total	ND	0.095		mg/Kg	1	8/30/2022 12:30:00 PM	69822
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	8/30/2022 12:30:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North Center Bottom 6'
Project: Mc Elvain
Collection Date: 8/25/2022 2:50:00 PM
Lab ID: 2208G95-007 **Matrix:** SOIL
Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	930	60		mg/Kg	20	8/30/2022 3:04:54 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/30/2022 1:45:43 PM	69837
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/30/2022 1:45:43 PM	69837
Surr: DNOP	96.1	21-129		%Rec	1	8/30/2022 1:45:43 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/30/2022 12:50:00 PM	69822
Surr: BFB	95.3	37.7-212		%Rec	1	8/30/2022 12:50:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 12:50:00 PM	69822
Toluene	ND	0.049		mg/Kg	1	8/30/2022 12:50:00 PM	69822
Ethylbenzene	ND	0.049		mg/Kg	1	8/30/2022 12:50:00 PM	69822
Xylenes, Total	ND	0.098		mg/Kg	1	8/30/2022 12:50:00 PM	69822
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	8/30/2022 12:50:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North Center West Wall Wide
Project: Mc Elvain
Collection Date: 8/25/2022 2:55:00 PM
Lab ID: 2208G95-008 **Matrix:** SOIL
Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	60		mg/Kg	20	8/30/2022 3:17:15 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/30/2022 1:56:19 PM	69837
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/30/2022 1:56:19 PM	69837
Surr: DNOP	97.0	21-129		%Rec	1	8/30/2022 1:56:19 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2022 1:09:00 PM	69822
Surr: BFB	98.5	37.7-212		%Rec	1	8/30/2022 1:09:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.024		mg/Kg	1	8/30/2022 1:09:00 PM	69822
Toluene	ND	0.048		mg/Kg	1	8/30/2022 1:09:00 PM	69822
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2022 1:09:00 PM	69822
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2022 1:09:00 PM	69822
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	8/30/2022 1:09:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North Center East Wall Wise
Project: Mc Elvain
Collection Date: 8/25/2022 3:00:00 PM
Lab ID: 2208G95-009 **Matrix:** SOIL
Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	ND	60		mg/Kg	20	8/30/2022 3:29:35 PM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/30/2022 2:06:55 PM	69837
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/30/2022 2:06:55 PM	69837
Surr: DNOP	105	21-129		%Rec	1	8/30/2022 2:06:55 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**RAA**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2022 1:29:00 PM	69822
Surr: BFB	101	37.7-212		%Rec	1	8/30/2022 1:29:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst:	**RAA**
Benzene	ND	0.024		mg/Kg	1	8/30/2022 1:29:00 PM	69822
Toluene	ND	0.047		mg/Kg	1	8/30/2022 1:29:00 PM	69822
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2022 1:29:00 PM	69822
Xylenes, Total	ND	0.095		mg/Kg	1	8/30/2022 1:29:00 PM	69822
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	8/30/2022 1:29:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North Bottom
Project: Mc Elvain
Collection Date: 8/25/2022 3:10:00 PM
Lab ID: 2208G95-010 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	17000	600		mg/Kg	200	8/31/2022 10:11:30 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	8/30/2022 2:17:32 PM	69837
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/30/2022 2:17:32 PM	69837
Surr: DNOP	83.5	21-129		%Rec	1	8/30/2022 2:17:32 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/30/2022 2:09:00 PM	69822
Surr: BFB	95.9	37.7-212		%Rec	1	8/30/2022 2:09:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 2:09:00 PM	69822
Toluene	ND	0.048		mg/Kg	1	8/30/2022 2:09:00 PM	69822
Ethylbenzene	ND	0.048		mg/Kg	1	8/30/2022 2:09:00 PM	69822
Xylenes, Total	ND	0.097		mg/Kg	1	8/30/2022 2:09:00 PM	69822
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	8/30/2022 2:09:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North East Wall
Project: Mc Elvain
Collection Date: 8/25/2022 3:15:00 PM
Lab ID: 2208G95-011 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	10000	590		mg/Kg	200	8/31/2022 10:23:54 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	8/30/2022 2:28:08 PM	69837
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/30/2022 2:28:08 PM	69837
Surr: DNOP	88.5	21-129		%Rec	1	8/30/2022 2:28:08 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/30/2022 2:28:00 PM	69822
Surr: BFB	94.8	37.7-212		%Rec	1	8/30/2022 2:28:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	8/30/2022 2:28:00 PM	69822
Toluene	ND	0.046		mg/Kg	1	8/30/2022 2:28:00 PM	69822
Ethylbenzene	ND	0.046		mg/Kg	1	8/30/2022 2:28:00 PM	69822
Xylenes, Total	ND	0.091		mg/Kg	1	8/30/2022 2:28:00 PM	69822
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	8/30/2022 2:28:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2208G95**
Date Reported: **9/2/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD
Client Sample ID: North West Wall
Project: Mc Elvain
Collection Date: 8/25/2022 3:20:00 PM
Lab ID: 2208G95-012 **Matrix:** SOIL **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	21000	1500		mg/Kg	500	8/31/2022 10:36:18 AM	69853
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	8/30/2022 2:38:46 PM	69837
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/30/2022 2:38:46 PM	69837
Surr: DNOP	91.1	21-129		%Rec	1	8/30/2022 2:38:46 PM	69837
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/30/2022 2:48:00 PM	69822
Surr: BFB	92.5	37.7-212		%Rec	1	8/30/2022 2:48:00 PM	69822
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	8/30/2022 2:48:00 PM	69822
Toluene	ND	0.047		mg/Kg	1	8/30/2022 2:48:00 PM	69822
Ethylbenzene	ND	0.047		mg/Kg	1	8/30/2022 2:48:00 PM	69822
Xylenes, Total	ND	0.094		mg/Kg	1	8/30/2022 2:48:00 PM	69822
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	8/30/2022 2:48:00 PM	69822

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208G95**
02-Sep-22

Client: GHD
Project: Mc Elvain

Sample ID: **MB-69853**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **69853**	RunNo: **90679**
Prep Date: **8/30/2022**	Analysis Date: **8/30/2022**	SeqNo: **3240572** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-69853**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **69853**	RunNo: **90679**
Prep Date: **8/30/2022**	Analysis Date: **8/30/2022**	SeqNo: **3240573** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208G95**
02-Sep-22

Client: GHD
Project: Mc Elvain

Sample ID: **LCS-69837**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3239736** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.1	64.4	127			
Surr: DNOP	4.6		5.000		91.9	21	129			

Sample ID: **MB-69837**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3239737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	21	129			

Sample ID: **2208G95-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **South Bottom**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3240140** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	48.45	0	87.9	36.1	154			
Surr: DNOP	4.3		4.845		87.8	21	129			

Sample ID: **2208G95-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **South Bottom**	Batch ID: **69837**	RunNo: **90655**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3240141** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	13	44.68	0	94.5	36.1	154	0.823	33.9	
Surr: DNOP	3.8		4.468		86.0	21	129	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208G95**
02-Sep-22

Client: GHD
Project: Mc Elvain

Sample ID: **lcs-69822**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **69822**	RunNo: **90686**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3241013** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	72.3	137			
Surr: BFB	2200		1000		218	37.7	212			S

Sample ID: **mb-69822**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **69822**	RunNo: **90686**
Prep Date: **8/29/2022**	Analysis Date: **8/30/2022**	SeqNo: **3241014** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208G95**
02-Sep-22

Client: GHD
Project: Mc Elvain

Sample ID: **lcs-69822** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **69822** RunNo: **90686**
Prep Date: **8/29/2022** Analysis Date: **8/30/2022** SeqNo: **3241068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.5	80	120			
Toluene	0.90	0.050	1.000	0	89.6	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.8	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	70	130			

Sample ID: **mb-69822** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **69822** RunNo: **90686**
Prep Date: **8/29/2022** Analysis Date: **8/30/2022** SeqNo: **3241069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.5	70	130			

Sample ID: **2208g95-001ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **South Bottom** Batch ID: **69822** RunNo: **90686**
Prep Date: **8/29/2022** Analysis Date: **8/30/2022** SeqNo: **3241072** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9407	0	94.3	68.8	120			
Toluene	0.91	0.047	0.9407	0	97.2	73.6	124			
Ethylbenzene	0.93	0.047	0.9407	0	99.3	72.7	129			
Xylenes, Total	2.8	0.094	2.822	0.02437	97.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.85		0.9407		90.4	70	130			

Sample ID: **2208g95-001amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **South Bottom** Batch ID: **69822** RunNo: **90686**
Prep Date: **8/29/2022** Analysis Date: **8/30/2022** SeqNo: **3241073** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.023	0.9276	0	92.7	68.8	120	3.07	20	
Toluene	0.89	0.046	0.9276	0	95.6	73.6	124	3.00	20	
Ethylbenzene	0.91	0.046	0.9276	0	98.0	72.7	129	2.73	20	
Xylenes, Total	2.7	0.093	2.783	0.02437	96.3	75.7	126	2.67	20	
Surr: 4-Bromofluorobenzene	0.83		0.9276		89.8	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: GHD Midland Work Order Number: 2208G95 RcptNo: 1

Received By: Tracy Casarrubias 8/27/2022 9:35:00 AM

Completed By: Tracy Casarrubias 8/27/2022 10:39:10 AM

Reviewed By: KPA 8-29-22

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: JN 8/29/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			
2	4.8	Good	Yes			
3	5.6	Good	Yes			

Chain-of-Custody Record

Client: GHD

Mailing Address: on file

Phone #:

email or Fax#: Christine.Matthews@GHD.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 48hr

Project Name: McElvain

Project #: 12592305

Project Manager: Christine Matthews

Sampler: Ryan Lovingfoss

On Ice: ☒ Yes ☐ No

# of Coolers: 3

Cooler Temp(including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2208G95	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8-25	1400	Soil	South Bottom	4oz L		001	X	X					X			
	1405		South West Wall			002										
	1410		South East Wall			003										
	1430		South Center Bottom 6'			004										
	1435		South Center East Wall			005										
	1440		South Center West wall wide			006										
	1450		North Center Bottom 6'			007										
	1455		North Center West Wall wide			008										
	1500		North Center East Wall wide			009										
	1510		North Bottom			010										
	1515		North East Wall			011										
	1520		North West Wall			012										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-25-22	1554				8/25/22	1554
8/26/22	1900			Courier	8/27/22	9:35

Remarks:

1.) 4.0 → 4.0°C

2.) 4.8 → −0.5 = 4.3°C

3.) 5.6 → 5.6°C

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Attachment C

Laboratory Analytical Reports and Chain-of-Custody Documentation - Eurofins

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3029-1
Laboratory Sample Delivery Group: 12592305
Client Project/Site: Delek - McElvain

For:
GHD Services Inc.
6121 Indian School Road NE
Suite 200
Albuquerque, New Mexico 87110

Attn: Christine Mathews

Authorized for release by:
10/5/2022 5:41:32 PM
Chad Bechtold, Project Manager
(813)690-3563
Chad.Bechtold@et.eurofinsus.com

Designee for

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

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

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

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Laboratory Job ID: 890-3029-1
SDG: 12592305

Table of Contents

Definitions/Glossary

Client: GHD Services Inc. Job ID: 890-3029-1
Project/Site: Delek - McElvain SDG: 12592305

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.
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.
¤	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 - McElvain

Job ID: 890-3029-1
SDG: 12592305

Job ID: 890-3029-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3029-1

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 4.2°C

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

GC Semi VOA
Method 8015MOD_NM: The 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.

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 - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: NE Wall

Date Collected: 09/21/22 10:35
Date Received: 09/22/22 09:34
Sample Depth: 0 - 5

Lab Sample ID: 890-3029-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		09/29/22 15:53	10/01/22 02:29	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		09/29/22 15:53	10/01/22 02:29	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		09/29/22 15:53	10/01/22 02:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		09/29/22 15:53	10/01/22 02:29	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		09/29/22 15:53	10/01/22 02:29	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		09/29/22 15:53	10/01/22 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/29/22 15:53*	*10/01/22 02:29*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/29/22 15:53*	*10/01/22 02:29*	*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	0.00100	mg/Kg			10/01/22 08:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	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 03:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 03:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/23/22 11:06*	*09/25/22 03:38*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/23/22 11:06*	*09/25/22 03:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9640**		50.1	8.60	mg/Kg			09/27/22 05:37	10

Client Sample ID: NW Wall

Date Collected: 09/21/22 13:00
Date Received: 09/22/22 09:34
Sample Depth: 0 - 6

Lab Sample ID: 890-3029-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000382	mg/Kg		09/29/22 15:53	10/01/22 02:55	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg		09/29/22 15:53	10/01/22 02:55	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg		09/29/22 15:53	10/01/22 02:55	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg		09/29/22 15:53	10/01/22 02:55	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		09/29/22 15:53	10/01/22 02:55	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg		09/29/22 15:53	10/01/22 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/29/22 15:53*	*10/01/22 02:55*	*1*

Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: NW Wall

Lab Sample ID: 890-3029-2
Matrix: Solid
Date Collected: 09/21/22 13:00
Date Received: 09/22/22 09:34
Sample Depth: 0 - 6

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*09/29/22 15:53*	*10/01/22 02:55*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	0.00100	mg/Kg			10/01/22 08:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	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 03:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 03:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/23/22 11:06	09/25/22 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/23/22 11:06*	*09/25/22 03:59*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/23/22 11:06*	*09/25/22 03:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.7**		4.99	0.857	mg/Kg			09/27/22 05:56	1

Client Sample ID: N Bottom

Lab Sample ID: 890-3029-3
Matrix: Solid
Date Collected: 09/21/22 11:15
Date Received: 09/22/22 09:34
Sample Depth: 20

Method: 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		09/30/22 14:51	10/04/22 14:18	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		09/30/22 14:51	10/04/22 14:18	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		09/30/22 14:51	10/04/22 14:18	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		09/30/22 14:51	10/04/22 14:18	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		09/30/22 14:51	10/04/22 14:18	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		09/30/22 14:51	10/04/22 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*09/30/22 14:51*	*10/04/22 14:18*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/30/22 14:51*	*10/04/22 14:18*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	0.00102	mg/Kg			10/01/22 08:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**27.5**	**J**	49.9	15.0	mg/Kg			09/26/22 12:14	1

Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: N Bottom

Lab Sample ID: 890-3029-3
Matrix: Solid
Date Collected: 09/21/22 11:15
Date Received: 09/22/22 09:34
Sample Depth: 20

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	**27.5**	**J**	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*09/23/22 11:06*	*09/25/22 04:20*	*1*
o-Terphenyl	*112*		*70 - 130*	*09/23/22 11:06*	*09/25/22 04:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4350**		25.2	4.32	mg/Kg			09/27/22 06:02	5

Client Sample ID: NC Bottom

Lab Sample ID: 890-3029-4
Matrix: Solid
Date Collected: 09/21/22 14:00
Date Received: 09/22/22 09:34
Sample Depth: 7

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000612**	**J**	0.00200	0.000384	mg/Kg		09/30/22 14:51	10/04/22 14:38	1
Toluene	**0.00100**	**J**	0.00200	0.000455	mg/Kg		09/30/22 14:51	10/04/22 14:38	1
Ethylbenzene	**0.000804**	**J**	0.00200	0.000564	mg/Kg		09/30/22 14:51	10/04/22 14:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		09/30/22 14:51	10/04/22 14:38	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		09/30/22 14:51	10/04/22 14:38	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		09/30/22 14:51	10/04/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/22 14:51*	*10/04/22 14:38*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/30/22 14:51*	*10/04/22 14:38*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00242**	**J**	0.00399	0.00101	mg/Kg			10/01/22 08:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**45.7**	**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	**30.7**	**J**	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:41	1
Diesel Range Organics (Over C10-C28)	**15.0**	**J B**	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		09/23/22 11:06	09/25/22 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/23/22 11:06*	*09/25/22 04:41*	*1*
o-Terphenyl	*103*		*70 - 130*	*09/23/22 11:06*	*09/25/22 04:41*	*1*

Client Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: NC Bottom

Date Collected: 09/21/22 14:00
Date Received: 09/22/22 09:34
Sample Depth: 7

Lab Sample ID: 890-3029-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.5		5.05	0.867	mg/Kg			09/27/22 06:08	1

Surrogate Summary

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3029-1	NE Wall	126	104
890-3029-2	NW Wall	101	89
890-3029-3	N Bottom	128	99
890-3029-4	NC Bottom	117	103
LCS 880-35720/1-A	Lab Control Sample	103	103
LCS 880-35824/1-A	Lab Control Sample	83	93
LCSD 880-35720/2-A	Lab Control Sample Dup	108	108
LCSD 880-35824/2-A	Lab Control Sample Dup	87	98
MB 880-35720/5-A	Method Blank	70	92
MB 880-35824/5-A	Method Blank	94	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3029-1	NE Wall	117	114
890-3029-2	NW Wall	117	113
890-3029-3	N Bottom	119	112
890-3029-4	NC Bottom	113	103
LCS 880-35263/2-A	Lab Control Sample	117	104
LCSD 880-35263/3-A	Lab Control Sample Dup	110	103
MB 880-35263/1-A	Method Blank	156 S1+	147 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35720/5-A
Matrix: Solid
Analysis Batch: 35814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35720

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 15:53	09/30/22 16:57	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/29/22 15:53	09/30/22 16:57	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/29/22 15:53	09/30/22 16:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 15:53	09/30/22 16:57	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/29/22 15:53	09/30/22 16:57	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/29/22 15:53	09/30/22 16:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*09/29/22 15:53*	*09/30/22 16:57*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/29/22 15:53*	*09/30/22 16:57*	*1*

Lab Sample ID: LCS 880-35720/1-A
Matrix: Solid
Analysis Batch: 35814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1096		mg/Kg		110	70 - 130
Toluene	0.100	0.09873		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1077		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2162		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1083		mg/Kg		108	70 - 130

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

Lab Sample ID: LCSD 880-35720/2-A
Matrix: Solid
Analysis Batch: 35814

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35720

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1096		mg/Kg		110	70 - 130	0	35
Toluene	0.100	0.1001		mg/Kg		100	70 - 130	1	35
Ethylbenzene	0.100	0.09889		mg/Kg		99	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2044		mg/Kg		102	70 - 130	6	35
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130	1	35

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

Lab Sample ID: MB 880-35824/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/30/22 14:51	10/04/22 11:52	1

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

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

Lab Sample ID: MB 880-35824/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/30/22 14:51	10/04/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*

Lab Sample ID: LCS 880-35824/1-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1004		mg/Kg		100	70 - 130
Toluene	0.100	0.1007		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09668		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2011		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1002		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 880-35824/2-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1036		mg/Kg		104	70 - 130	3	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	3	35
Ethylbenzene	0.100	0.09909		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2058		mg/Kg		103	70 - 130	2	35
o-Xylene	0.100	0.1030		mg/Kg		103	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

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		09/23/22 11:06	09/24/22 20:31	1

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

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

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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
OII 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

Surrogate	*MB %Recovery*	*MB 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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*104*		*70 - 130*

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	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35273/1-A
Matrix: Solid
Analysis Batch: 35457

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 04:42	1

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-35273/2-A
Matrix: Solid
Analysis Batch: 35457

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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

QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

GC VOA

Prep Batch: 35720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	5035	
890-3029-2	NW Wall	Total/NA	Solid	5035	
MB 880-35720/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35720/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35720/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 35814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	8021B	35720
890-3029-2	NW Wall	Total/NA	Solid	8021B	35720
MB 880-35720/5-A	Method Blank	Total/NA	Solid	8021B	35720
LCS 880-35720/1-A	Lab Control Sample	Total/NA	Solid	8021B	35720
LCSD 880-35720/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35720

Prep Batch: 35824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-3	N Bottom	Total/NA	Solid	5035	
890-3029-4	NC Bottom	Total/NA	Solid	5035	
MB 880-35824/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 35871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	Total BTEX	
890-3029-2	NW Wall	Total/NA	Solid	Total BTEX	
890-3029-3	N Bottom	Total/NA	Solid	Total BTEX	
890-3029-4	NC Bottom	Total/NA	Solid	Total BTEX	

Analysis Batch: 36027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-3	N Bottom	Total/NA	Solid	8021B	35824
890-3029-4	NC Bottom	Total/NA	Solid	8021B	35824
MB 880-35824/5-A	Method Blank	Total/NA	Solid	8021B	35824
LCS 880-35824/1-A	Lab Control Sample	Total/NA	Solid	8021B	35824
LCSD 880-35824/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35824

GC Semi VOA

Prep Batch: 35263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	8015NM Prep	
890-3029-2	NW Wall	Total/NA	Solid	8015NM Prep	
890-3029-3	N Bottom	Total/NA	Solid	8015NM Prep	
890-3029-4	NC Bottom	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	
LCSD 880-35263/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

GC Semi VOA

Analysis Batch: 35322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	8015B NM	35263
890-3029-2	NW Wall	Total/NA	Solid	8015B NM	35263
890-3029-3	N Bottom	Total/NA	Solid	8015B NM	35263
890-3029-4	NC Bottom	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: 35398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Total/NA	Solid	8015 NM	
890-3029-2	NW Wall	Total/NA	Solid	8015 NM	
890-3029-3	N Bottom	Total/NA	Solid	8015 NM	
890-3029-4	NC Bottom	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Soluble	Solid	DI Leach	
890-3029-2	NW Wall	Soluble	Solid	DI Leach	
890-3029-3	N Bottom	Soluble	Solid	DI Leach	
890-3029-4	NC Bottom	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	

Analysis Batch: 35457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3029-1	NE Wall	Soluble	Solid	300.0	35273
890-3029-2	NW Wall	Soluble	Solid	300.0	35273
890-3029-3	N Bottom	Soluble	Solid	300.0	35273
890-3029-4	NC Bottom	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

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: NE Wall

Lab Sample ID: 890-3029-1

Date Collected: 09/21/22 10:35
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			5.03 g	5 mL	35720	09/29/22 15:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 02:29	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35871	10/01/22 08:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35398	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 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 03:38	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		10	50 mL	50 mL	35457	09/27/22 05:37	CH	EET MID

Client Sample ID: NW Wall

Lab Sample ID: 890-3029-2

Date Collected: 09/21/22 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			5.04 g	5 mL	35720	09/29/22 15:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35814	10/01/22 02:55	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35871	10/01/22 08:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35398	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 03:59	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 05:56	CH	EET MID

Client Sample ID: N Bottom

Lab Sample ID: 890-3029-3

Date Collected: 09/21/22 11:15
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			4.95 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 14:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35871	10/01/22 08:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35398	09/26/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 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 04:20	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35273	09/23/22 12:06	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	35457	09/27/22 06:02	CH	EET MID

Client Sample ID: NC Bottom

Lab Sample ID: 890-3029-4

Date Collected: 09/21/22 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			5.01 g	5 mL	35824	09/30/22 14:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/04/22 14:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35871	10/01/22 08:06	AJ	EET MID

Lab Chronicle

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3029-1
SDG: 12592305

Client Sample ID: NC Bottom

Date Collected: 09/21/22 14:00
Date Received: 09/22/22 09:34

Lab Sample ID: 890-3029-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35398	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 04:41	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 06:08	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 - McElvain

Job ID: 890-3029-1
SDG: 12592305

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 - McElvain

Job ID: 890-3029-1
SDG: 12592305

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 - McElvain

Job ID: 890-3029-1
SDG: 12592305

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3029-1	NE Wall	Solid	09/21/22 10:35	09/22/22 09:34	0 - 5
890-3029-2	NW Wall	Solid	09/21/22 13:00	09/22/22 09:34	0 - 6
890-3029-3	N Bottom	Solid	09/21/22 11:15	09/22/22 09:34	20
890-3029-4	NC Bottom	Solid	09/21/22 14:00	09/22/22 09:34	7

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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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Project Manager:	Christine Mathews	Bill to: (if different)	Invoicing-us@ghd.com
Company Name:	GHD	Company Name:	
Address:	2055 Niagara Falls 14304	Address:	
City, State ZIP:	Niagara Falls NY 14304	City, State ZIP:	
Phone:	1-505-269-0086 Email:	Christine.mathews@ghd.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Delek McGlauin	Turn Around	
Project Number:	12592305	☑ Routine ☐ Rush	
Project Location:	Eunice NM	Due Date:	
Sampler's Name:	Liam Giersdorf	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR#009
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.4
Total Containers:		Corrected Temperature:	4.2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTex 8021B	TPH/GRO 8015	TPH/DRO 8015	Chloride 300
NE Wall	So.	0921	1035	0-5'				X	X	X	X
NW Wall			1300	0-6'							
N Bottom			1115	20'							
NC Bottom			1400	7'							

890-3029 Chain of Custody

Preservative Codes

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

Sample Comments

Email results to:
j.t.murray@ghd.com
liam.giersdorf@ghd.com

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 Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Released by: Liam Giersdorf 092222 850 CoeAp 9.22.22 8:40

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3029-1
SDG Number: 12592305

Login Number: 3029
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: 890-3029-1
SDG Number: 12592305

Login Number: 3029
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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-3042-1
Laboratory Sample Delivery Group: 12592305
Client Project/Site: Delek - McElvain

For:
GHD Services Inc.
6121 Indian School Road NE
Suite 200
Albuquerque, New Mexico 87110

Attn: Christine Mathews

Authorized for release by:
10/5/2022 6:00:09 PM
Chad Bechtold, Project Manager
(813)690-3563
Chad.Bechtold@et.eurofinsus.com

Designee for

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

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

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

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Laboratory Job ID: 890-3042-1
SDG: 12592305

Table of Contents

Definitions/Glossary

Client: GHD Services Inc. Job ID: 890-3042-1
Project/Site: Delek - McElvain SDG: 12592305

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
¤	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. Job ID: 890-3042-1
Project/Site: Delek - McElvain SDG: 12592305

Job ID: 890-3042-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3042-1

Receipt
The sample was received on 9/23/2022 12:38 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 time was 2.6°C

GC VOA
Method 8021B: The laboratory control sample duplicate (LCSD) associated with preparation batch 880-36056 and analytical batch 880-36027 was outside acceptance criteria for Ethylbenzene. 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.

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-35422/2-A) and (LCSD 880-35422/3-A).

Method 8015MOD_NM: The method blank for preparation batch 880-35422 and analytical batch 880-35341 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.

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 - McElvain

Job ID: 890-3042-1
SDG: 12592305

Client Sample ID: North Bottom -25

Date Collected: 09/22/22 14:00
Date Received: 09/23/22 12:38
Sample Depth: 25

Lab Sample ID: 890-3042-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg		10/04/22 13:19	10/05/22 05:12	1
Toluene	**0.000480**	**J**	0.00202	0.000460	mg/Kg		10/04/22 13:19	10/05/22 05:12	1
Ethylbenzene	<0.00202	U *-	0.00202	0.000570	mg/Kg		10/04/22 13:19	10/05/22 05:12	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		10/04/22 13:19	10/05/22 05:12	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		10/04/22 13:19	10/05/22 05:12	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		10/04/22 13:19	10/05/22 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*10/04/22 13:19*	*10/05/22 05:12*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/04/22 13:19*	*10/05/22 05:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			10/05/22 08:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**60.6**		50.0	15.0	mg/Kg			09/27/22 09:52	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	**31.9**	**J B**	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 23:31	1
Diesel Range Organics (Over C10-C28)	**28.7**	**J B**	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 23:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/26/22 15:10*	*09/26/22 23:31*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/26/22 15:10*	*09/26/22 23:31*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6530**		49.8	8.55	mg/Kg			09/28/22 04:03	10

Surrogate Summary

Client: GHD Services Inc. Job ID: 890-3042-1
Project/Site: Delek - McElvain SDG: 12592305

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3042-1	North Bottom -25	127	99
LCS 880-36056/1-A	Lab Control Sample	92	96
LCSD 880-36056/2-A	Lab Control Sample Dup	93	96
MB 880-35824/5-A	Method Blank	94	82
MB 880-36056/5-A	Method Blank	99	84

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3042-1	North Bottom -25	106	114
LCS 880-35422/2-A	Lab Control Sample	133 S1+	143 S1+
LCSD 880-35422/3-A	Lab Control Sample Dup	134 S1+	145 S1+
MB 880-35422/1-A	Method Blank	99	106

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3042-1
SDG: 12592305

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35824/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35824

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		09/30/22 14:51	10/04/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		09/30/22 14:51	10/04/22 11:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/30/22 14:51*	*10/04/22 11:52*	*1*

Lab Sample ID: MB 880-36056/5-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 36056

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 13:19	10/04/22 22:36	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		10/04/22 13:19	10/04/22 22:36	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		10/04/22 13:19	10/04/22 22:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		10/04/22 13:19	10/04/22 22:36	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		10/04/22 13:19	10/04/22 22:36	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		10/04/22 13:19	10/04/22 22:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/04/22 13:19*	*10/04/22 22:36*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*10/04/22 13:19*	*10/04/22 22:36*	*1*

Lab Sample ID: LCS 880-36056/1-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 36056

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09530		mg/Kg		95	70 - 130		
Toluene			0.100	0.09639		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.08932		mg/Kg		89	70 - 130		
m-Xylene & p-Xylene			0.200	0.1860		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09577		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-36056/2-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07421		mg/Kg		74	70 - 130	25	35

Eurofins Carlsbad

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3042-1
SDG: 12592305

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

Lab Sample ID: LCSD 880-36056/2-A
Matrix: Solid
Analysis Batch: 36027

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 36056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.07531		mg/Kg		75	70 - 130	25	35
Ethylbenzene			0.100	0.06896	*-	mg/Kg		69	70 - 130	26	35
m-Xylene & p-Xylene			0.200	0.1479		mg/Kg		74	70 - 130	23	35
o-Xylene			0.100	0.07794		mg/Kg		78	70 - 130	21	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

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

Lab Sample ID: MB 880-35422/1-A
Matrix: Solid
Analysis Batch: 35341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 35422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.27	J	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 20:03	1
Diesel Range Organics (Over C10-C28)	24.03	J	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 20:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		09/26/22 15:10	09/26/22 20:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*09/26/22 15:10*	*09/26/22 20:03*	*1*
o-Terphenyl	*106*		*70 - 130*	*09/26/22 15:10*	*09/26/22 20:03*	*1*

Lab Sample ID: LCS 880-35422/2-A
Matrix: Solid
Analysis Batch: 35341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 35422

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1096		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	814.0		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*143*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-35422/3-A
Matrix: Solid
Analysis Batch: 35341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35422

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1110		mg/Kg		111	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	829.5		mg/Kg		83	70 - 130	2	20

Eurofins Carlsbad

QC Sample Results

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3042-1
SDG: 12592305

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

Lab Sample ID: LCSD 880-35422/3-A
Matrix: Solid
Analysis Batch: 35341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 35422

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*134*	*S1+*	*70 - 130*
o-Terphenyl	*145*	*S1+*	*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

Analyte	MB Result	MB 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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	242.1		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: GHD Services Inc. Job ID: 890-3042-1
Project/Site: Delek - McElvain SDG: 12592305

GC VOA

Prep Batch: 35824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35824/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 36027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	8021B	36056
MB 880-35824/5-A	Method Blank	Total/NA	Solid	8021B	35824
MB 880-36056/5-A	Method Blank	Total/NA	Solid	8021B	36056
LCS 880-36056/1-A	Lab Control Sample	Total/NA	Solid	8021B	36056
LCSD 880-36056/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36056

Prep Batch: 36056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	5035	
MB 880-36056/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36056/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36056/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 36126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	8015B NM	35422
MB 880-35422/1-A	Method Blank	Total/NA	Solid	8015B NM	35422
LCS 880-35422/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35422
LCSD 880-35422/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35422

Prep Batch: 35422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	8015NM Prep	
MB 880-35422/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35422/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35422/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	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	

QC Association Summary

Client: GHD Services Inc.
Project/Site: Delek - McElvain

Job ID: 890-3042-1
SDG: 12592305

HPLC/IC

Analysis Batch: 35521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3042-1	North Bottom -25	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: Delek - McElvain

Job ID: 890-3042-1
SDG: 12592305

Client Sample ID: North Bottom -25

Date Collected: 09/22/22 14:00
Date Received: 09/23/22 12:38

Lab Sample ID: 890-3042-1

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			4.96 g	5 mL	36056	10/04/22 13:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36027	10/05/22 05:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36126	10/05/22 08:42	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35485	09/27/22 09:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35422	09/26/22 15:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35341	09/26/22 23:31	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	35376	09/26/22 10:30	SMC	EET MID
Soluble	Analysis	300.0		10			35521	09/28/22 04:03	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 - McElvain

Job ID: 890-3042-1
SDG: 12592305

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 - McElvain

Job ID: 890-3042-1
SDG: 12592305

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 - McElvain

Job ID: 890-3042-1
SDG: 12592305

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3042-1	North Bottom -25	Solid	09/22/22 14:00	09/23/22 12:38	25

Chain of Custody

eurofins | Environment Testing Xenco

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Christine Mathews	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	City, State ZIP:	
Phone:	505-269-0086 Email:	christine.mathews@ghd.com	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Delek McElvain	Turn Around	
Project Number:	12592305	☒ Routine ☐ Rush	
Project Location:	Hobbs NM	Due Date:	
Sampler's Name:	Liam Giersdorf	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	90		

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TMM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.8	
Total Containers:		Corrected Temperature:	2.6	

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX 8021B	TPH/DRO mod 8015	TPH/GRO mod 8015	Chloride 300	Sample Comments
No.#4 Bottom -25	soil	0922	1400	25'				X	X	X	X	

890-3042 Chain of Custody

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 Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Released by: Liam Giersdorf 092322 1231 Clue Carf 9.23.22 1238

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 890-3042-1
SDG Number: 12592305

Login Number: 3042
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: 890-3042-1
SDG Number: 12592305

Login Number: 3042
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	

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 162911

CONDITIONS

Operator: 3 Bear Energy-Cottonwood, LLC 7102 Commerce Way Brentwood, TN 37027	OGRID: 330291
	Action Number: 162911
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. Bottom and sidewall confirmation soil samples should represent no more than 200 ft2 for the entire length of he release. Sidewall samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release, regardless of where depth to water is observed. Variance for liner installation approved. Most of release is off pad and needs to adhere to reclamation standards.	1/4/2023