General Information

NMOCD District:	District II	Incident ID:	nAPP2323237413
Landowner:	Connally	RP Reference:	N/A
Client:	Solaris Midstream Water Company	Site Location:	Mobley Water Recycling Facility 2
Date:	7/8/2024	Project #:	23E-04909
Client Contact:	Rob Kirk	Phone #:	(469) 978-5620
Vertex PM:	Chance Dixon	Phone #:	(575) 988-1472

Objective

The objective of the Environmental Remediation Work Plan is to identify exceedances found during the site assessment/characterization activity and propose an appropriate remediation technique to address these areas at Mobley Water Recycling Facility 2 (Mobley). Areas of environmental concern identified and delineated include the entrance to the facility, the riverine located just south of the site, and the right of way and pasture area located west of the site. Closure criteria has been determined for the pasture and riverine areas and Solaris Water Midstream Company (Solaris) and Vertex Resource Group Ltd. (Vertex) seek to obtain a deferral for the facility. All applicable research as it pertains to closure criteria selection is presented in Attachment 1.

Site Assessment/Characterization and Geologic Structure

Site characterization was completed on March 15, 2024. A total of 51 sample points (boreholes) were established, and samples were collected for field screening/lab analysis. Samples were collected in the release area within the lease boundary, in the riverine south of the site, and in the pasture area along the right of way. The pasture and pad areas of the release were horizontally and vertically delineated with field screening and lab analysis. Vertical delineation in the riverine area was attempted with a hand auger and hit refusal at four feet bgs (below ground surface). Background soil samples were collected upgradient from the release area in the riverine after initial delineation efforts. The borehole and background sample locations are presented in Figures 1 and 2 (Attachment 2). Laboratory analysis results from the background have been compared to NMOCD's strictest closure criteria and the results from the characterization activity are presented in Table 4 (Attachment 3). Exceedances are identified in the table as bold with a grey/green background.

After reviewing the local geology and the historical use of the area in which Mobley is located, Vertex has determined that there is existing background chlorides that exceed NMOCD's strictest closure criteria as outlined in Table 1. The site sits downgradient to the Rustler Formation and has a lithology that consists of carbonates and evaporites that include gypsum and dolomite. Upon background sampling, soils with salt crystals were encountered. These soils are directly correlated with a castile gypsum layer from the formation. Recent documentation and aerial imagery demonstrate a history of water flowing from the intermittent stream downgradient from the formation and carrying sediments down into the release area. The extent of the Rustler Aquifer also runs into southern New Mexico from Texas into this area. It is a confined and unconfined aquifer that consists of carbonates and evaporites of the formation. The groundwater in this area occurs in partly dissolved dolomite, limestone, and gypsum. This concludes that natural background material that is high in salinity is being naturally combined with the contaminated material from the release (Texas Aquifers Study, 2016). Laboratory analysis of the background samples depicted natural background chloride levels higher than the closure criteria for areas where depth to groundwater is less than 50 feet bgs. The background laboratory data is included in Table 4 (Attachment 3). The laboratory analysis reports are included in Attachment 5.

Table 1. Closure Criteria Determination			
Site Name: Mobley Water Recycling Facility 2			
Spill Coordinates: 32.295412, -103.924898		X: UTM easting	Y: UTM northing
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	37	feet
	Distance between release and nearest DTGW reference	3,600	feet
		0.68	miles
	Date of nearest DTGW reference measurement	September 11, 2020	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	45	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	5,224	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	33,885	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or**	2,820	feet
	ii) Within 1000 feet of any fresh water well or spring	2,820	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	1,104	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	25,429	feet
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
	Distance between release and nearest unstable area	0	feet
10	Within a 100-year Floodplain	500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	7,765	feet
11	Soil Type	Reeves-Gypsum Complex	
12	Ecological Classification	Loamy	
13	Geology	Rustler Formation, Pr	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

The portion of the release area that is located in the pasture and ROW areas that are shaded in yellow in Figure 1 will assume the following concentration limits (Table 2).

Table 1. Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
< 50 feet	Chloride - Horizontal	600 mg/kg
	Chloride - Vertical	250 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Remedial Activities

Areas identified with contaminant concentrations above NMOCD's strictest closure criteria in the pasture area west of the site and right of way areas will be remediated site through excavation. Laboratory results from the site assessment/characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. The soil will be excavated to the extent of the known contamination under the strictest criteria. Field screening will be utilized to confirm the removal of contaminated soil below the selected criteria. Contaminated soil will be stored on a 30-mil liner and then transported to disposal. During excavation activities, confirmatory samples will be collected and laboratory analysis will be completed to confirm that the closure criteria has been met. The excavation will be backfilled with clean soil sourced locally.

Background Chlorides/Remediation Plan Denial

According to 19.15.29.12 NMAC – Closure Criteria for Soils Impacted by a Release, "numerical limits or natural background level, whichever is greater" may be used to determine the level of remediation required for a release where chlorides exceed closure criteria. On April 17, 2024, Solaris submitted a Remediation Plan written by Vertex through the NMOCD portal. On May 6, 2024, the Remediation Plan was denied due to some of the background data containing small traces of TPH. It was deemed that these samples could not be considered true background as background samples should not contain any TPH per 19.15.29.12 NMAC. In a meeting in Artesia, New Mexico, it was agreed between Vertex and NMOCD that more background samples should be obtained in the riverine area from the surface to four feet bgs to justify the background approach. On June 16, 2024, Vertex collected more background boreholes which contained only exceedances to chloride concentrations. Laboratory analyses for these background boreholes are included in Table 4. The adjusted closure criteria is based on the average chloride levels collected in the riverine outside of the site. No changes have been made to the constituent limits for TPH, BTEX, or benzene. The limit for chloride is based on the average concentration of sample points BG24-11, BG24-12, BG24-17, and BG24-18 (Figure 2). The riverine area of the release along with a ten-foot buffer on the north and south perimeters of it (for BH23-03, 05, 06, and 08) will be remediated through soil washing. The soil in the riverine will be washed out as much as possible until it reaches the adjusted chloride criteria below. Vertex proposes that the portion of the release area located in the riverine assume the following concentration limits (Table 3). Email correspondence between Vertex and NMOCD regarding the Remediation Plan submission is included in Attachment 1.

Table 3. Closure Criteria for Soils Impacted by a Release BACKGROUND		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	**Constituent**	**Limit**
< 50 feet	Chloride 0'	7,756 mg/kg
	Chloride 1'	11,057 mg/kg
	Chloride 2'	11,112 mg/kg
	Chloride 3'	12,525 mg/kg
	Chloride 4'	6,175 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Deferral Request

Solaris and Vertex would like to request a deferral for the release area inside of the lease boundary. Performing remedial activities in these areas would pose a risk to the structural integrity of the soil underneath the equipment on site and create a bigger pathway for future chloride impacts. Therefore, the exceedances found in these areas will be left in situ until the site is decommissioned and all produced water recycling activities are terminated. The area to be deferred is exhibited in Figure 1.

Should you have any questions or concerns, please do not hesitate to contact Chance Dixon at 575.988.1472 or cdixon@vertexresource.com.

Chance Dixon

Chance Dixon, B.Sc.
PROJECT MANAGER, REPORTING

7/30/2024
Date

Attachments

Attachment 1: NMCOD C-141 Report and NMOCD Correspondence
Attachment 2: Sample Locations - Remediation Plan Figure 1
Attachment 3: Laboratory Results Table and Laboratory Analysis
Attachment 4: Closure Criteria Research
Attachment 5: Laboratory Reports and Chain of Custody Forms

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	nAPP2323237413
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Solaris Water, LLC	OGRID 371643
Contact Name Rob Kirk	Contact Telephone O 432-203-9020 C 469-978-5620
Contact email Rob.Kirk@ariswater.com	Incident # *(assigned by OCD)* nAPP2323237413
Contact mailing address 3305 Boyd Dr, Carlsbad NM 88220	

Location of Release Source

Latitude 32.29534 Longitude -103.92254
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Mobley Water Reuse 2	Site Type Water Recycling
Date Release Discovered 19 Aug 2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
C	19	23S	30E	Eddy

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

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) 80	Volume Recovered (bbls) 20
	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 The Mobley Water Resue Facility had an underground pipe weld fail causing a release of 80 barrels of Produced Water. The release was stopped quickly and repairs were made.

Incident ID	nAPP2323237413
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? The volume of produced water released

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
NMOCD web portal NOR completed by Rob Kirk, email to NMOCD

Initial Response

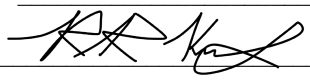
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☑ 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: Rob Kirk
Title: Vice President, Environmental Compliance
Signature: 
Date: 08/23/2023
email: Rob.Kirk@ariswater.com
Telephone: O 432-203-9020 C 469-978-5620

OCD Only

Received by: _____ Date: _____

Lisa Roback

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, July 10, 2024 2:59 PM
To: Chance Dixon
Cc: Rob Kirk; Michael Moffitt; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

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Chance,

I haven't had a chance to look at it yet. Review her conditions of approval. I would adjust the report to stem her points of contention unless we discussed some other resolution it in the Teams meeting, then reload the report onto the OCD Portal. Let me know when you upload the report and I will try to take reviewer ship before it gets assigned to someone else. I don't have control of which reports are initially assigned to me. Thank you

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Chance Dixon <cdixon@vertexresource.com>
Sent: Wednesday, July 10, 2024 2:40 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertexresource.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Afternoon Robert,

Just following up to see if you had time to catch up on this email. Understand you are busy. Let me know if you have any concerns regarding this project.

Thank you,

From: Chance Dixon
Sent: Monday, July 8, 2024 2:16 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertexresource.com>; Bratcher, Michael, EMNRD

<mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Good morning Mr. Hamlet,

I wanted to touch base on this incident and give you an update. Not sure if you remember, but you and I discussed this at your office with Chad. As you may recall, we had submitted a Remediation Plan for the incident, which unfortunately was recently denied by Shelly.

Given your knowledge and involvement on the project, I respectfully request that you consider reviewing the plan personally. We are concerned that involving someone unfamiliar with our conversations about the project with the specifics could lead to complications.

We genuinely appreciate your time and understanding in this matter, and assure you that our intention is solely to resolve this incident efficiently and effectively.

Thank you,

Chance Dixon B.Sc.
Project Manager

Vertex Resource Services Inc.
3101 Boyd Drive,
Carlsbad, NM 88220

C 575.988.1472

www.vertex.ca
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From: Chance Dixon
Sent: Tuesday, April 23, 2024 9:39 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Morning all,

Understand it's been a while since we met on this and it is not fresh on the mind so I apologize for the delay in update. Solaris has submitted the Remediation Plan for the release below.

I'd like to extend our appreciation for your time on this project. Please let us know if there are any questions or concerns with the plan. We want to make sure it gets completed the right way.

Thank you,

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, March 6, 2024 3:54 PM
To: Chance Dixon <cdixon@vertex.ca>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Thanks, wanted to make sure we were looking at the correct incident.

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Chance Dixon <cdixon@vertex.ca>
Sent: Wednesday, March 6, 2024 3:53 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Yes sir it is.

Chance

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, March 6, 2024 3:52 PM
To: Chance Dixon <cdixon@vertex.ca>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Chance,

Is the incident number for this one NAPP2323237413 MOBLEY WATER RECYCLING FACILITY 2?

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Chance Dixon <cdixon@vertex.ca>
Sent: Wednesday, March 6, 2024 2:38 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Thank you gentlemen,

I just sent the Teams invite for 10 a.m. next Wednesday, but is it possible to move it to 9 a.m. instead? Rob with Solaris has a medical appointment at 10 and would like to try to meet just before it.

Thank you for your patience.

Regards,

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, March 6, 2024 1:15 PM
To: Chance Dixon <cdixon@vertex.ca>
Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

Chance,

Set up a Teams Meeting for Wednesday March 13th @ 10 a.m. if that work for everybody's schedule. Invite myself and Mike Bratcher, we can discuss for a few minutes. Regards

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Chance Dixon <cdixon@vertex.ca>
Sent: Friday, March 1, 2024 3:56 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Cc: Rob Kirk <rob.kirk@ariswater.com>; Michael Moffitt <MMoffitt@vertex.ca>
Subject: [EXTERNAL] Solaris - Mobley Water Recycling Facility 2

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Greetings Mr. Hamlet,

It was good seeing you at the karst meeting this week. Vertex has been working diligently on a site on behalf of Solaris Water Midstream in Eddy County over the past few months. We have been focusing on delineation and the development of a work plan. In light of our progress, we are seeking your insights on a couple of specific areas within the release.

We are hoping to schedule a meeting with you next week at your earliest convenience. The particular area of interest involves an intermittent stream that has exhibited intermittent water flow. We believe that a brief discussion with you would greatly assist us with the background data that we have collected and formulating appropriate remediation techniques for said areas.

Let me know if you have any availability.

Thank you,

Chance Dixon B.Sc.
Project Manager

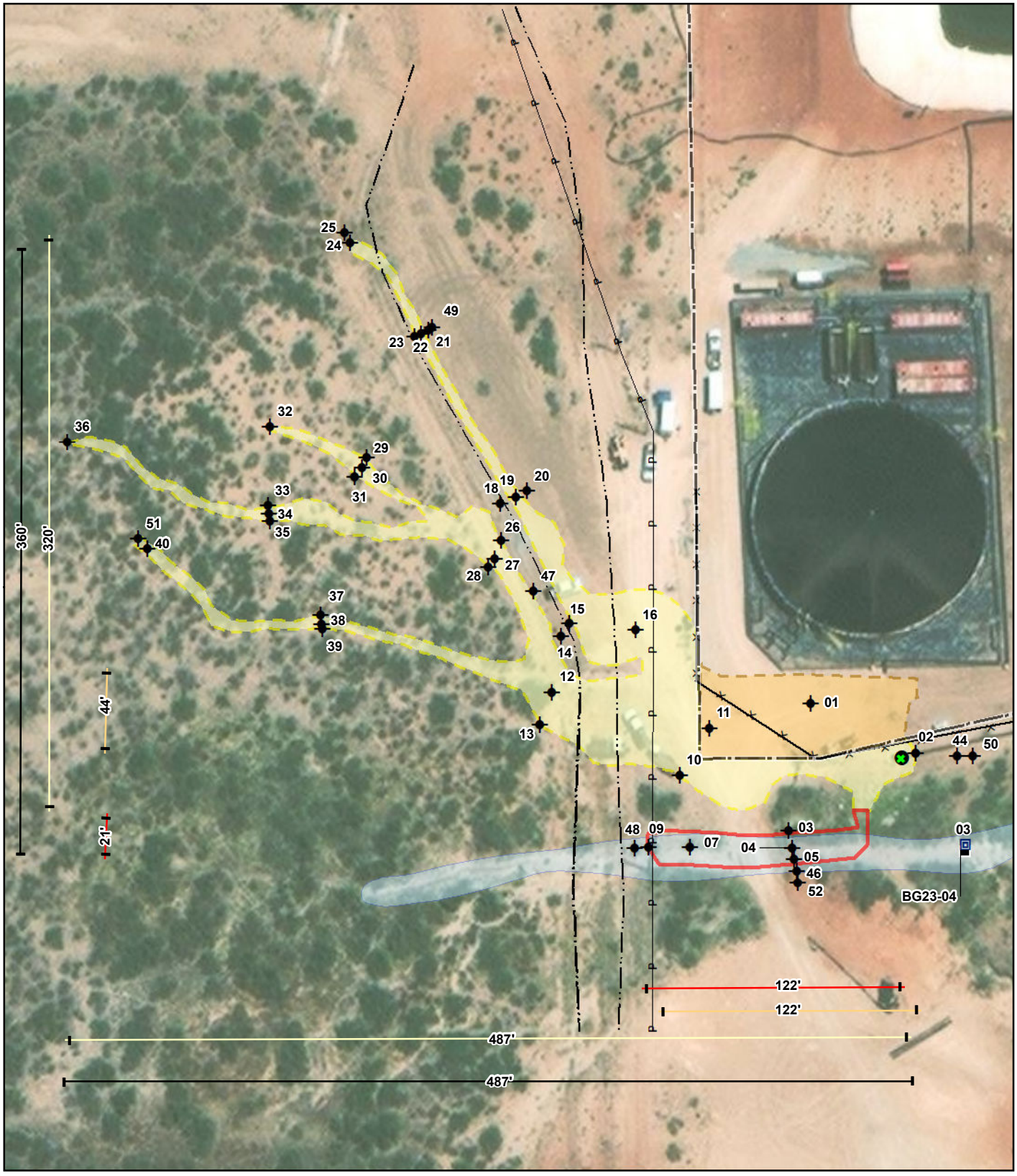
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ATTACHMENT 2 – Figures



- Background Sample
- Borehole (Prefixed by "BH23-")
- Point of Release
- Water Quality Sample (Prefixed by "SW23-")
- Fence
- Pipeline (Underground)
- Powerline
- Approximate Lease Boundary
- Approximate Deferral Area (~ 5,371 sq.ft.)
- Approximate Remediation Area (~ 15,198 sq.ft.)
- Riverine (Adjusted Criteria) (~2,292 sq.ft.)
- Intermittent Stream

VERTEX

0 15 30 60 ft
NAD 1983 UTM Zone 13N
Date: Jul 12/24

Map Center:
Lat: 32.295685
Long: -103.925617

N

Characterization Schematic
Mobley Water Recycling Facility 2

FIGURE: 1

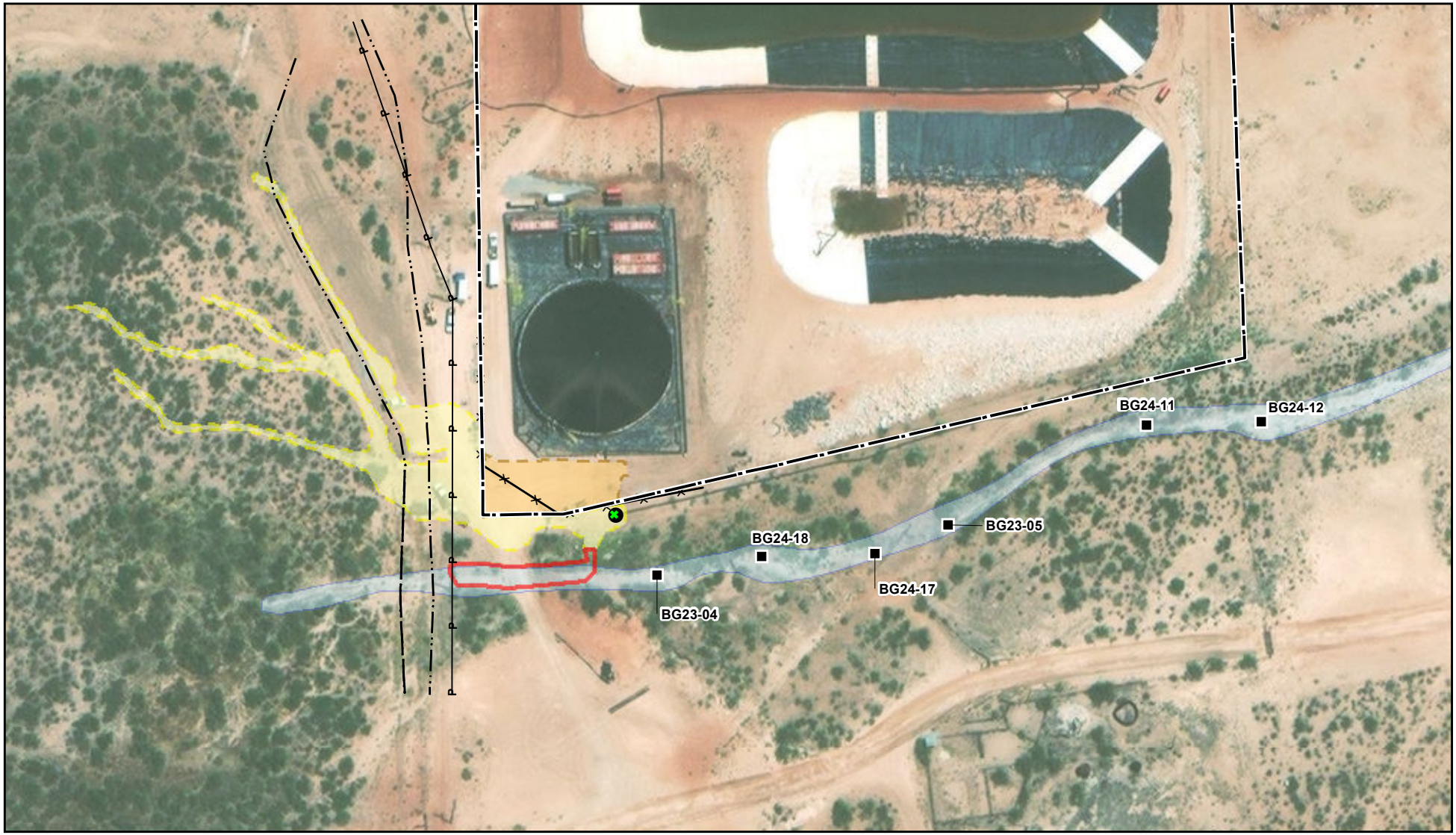
SOLARIS WATER MIDSTREAM

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Notes: Georeferenced image from Esri, 2023. Approximate lease boundary from imagery by Vertex Professional Services Ltd. (Vertex), 2023. Site features from GPS by Vertex, 2023. BH50 and BH52 from site sketch by Vertex, 2024.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Solaris Water Midstream\23E-04909 - Mobley Wtr Recycling Facility 2\Figure 1 Characterization Schematic (23E-04909)\ID18870.mxd



- Background Sample
- Water Quality Sample (Prefixed by "SW23-")
- Point of Release
- Fence
- Pipeline (Underground)
- Powerline
- Approximate Lease Boundary
- Approximate Deferral Area (~ 5,371 sq.ft.)
- Approximate Remediation Area (~ 15,198 sq.ft.)
- Riverine (Adjusted Criteria) (~2,292 sq.ft.)
- Intermittent Stream

VERTEX

0 30 60 120 ft

NAD 1983 UTM Zone 13N

Date: Jul 05/24

Map Center:
Lat: 32.295639,
Long:-103.924572

N

Background Schematic
Mobley Water Recycling Facility 2

FIGURE:
2

SOLARIS WATER MIDSTREAM

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Notes: Georeferenced image from Esri, 2022. Approximate lease boundary and stream from imagery by Vertex Professional Services Ltd. (Vertex), 2024. Site features from GPS by Vertex, 2023 & 2024.

VERSATILITY. EXPERTISE.

Document Path: S:\04 - Geomatics\1-Projects_US PROJECTS\Solaris Water Midstream\23E-04909 - Mobley Wtr Recycling Falicity 2\Figure 2 Background Schematic (23E-04909)ID18609.mxd

ATTACHMENT 3 – Table

Client Name: Solaris Water Midstream Company
Site Name: Mobley Water Recycling Facility 2
NMOCD Tracking #: nAPP2323237413
Project #: 23E-04909

Table 4. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs and Background

Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BG23-04	0	12/16/2023	ND	ND	ND	ND	ND	ND	ND	**601**
BG23-04	2	12/16/2023	ND	ND	ND	ND	ND	ND	ND	484
BG23-05	0	12/16/2023	ND	ND	ND	ND	ND	ND	ND	**1850**
BG23-05	2	12/16/2023	ND	ND	ND	ND	ND	ND	ND	**2590**
BG24-11	0	6/13/2024	ND	ND	ND	ND	ND	ND	ND	90
BG24-11	1	6/13/2024	ND	ND	ND	ND	ND	ND	ND	130
BG24-11	2	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**4400**
BG24-11	3	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**2100**
BG24-11	4	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**2400**
BG24-12	0	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**6800**
BG24-12	1	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**7100**
BG24-12	2	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**6200**
BG24-12	3	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**7000**
BG24-12	4	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**5900**
BG24-17	0	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**29000**
BG24-17	1	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**18000**
BG24-17	2	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**25000**
BG24-17	3	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**24000**
BG24-17	4	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**2400**
BG24-18	0	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**8200**
BG24-18	1	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**19000**
BG24-18	2	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**28000**
BG24-18	3	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**17000**
BG24-18	4	6/13/2024	ND	ND	ND	ND	ND	ND	ND	**14000**
BH23-01	0	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**5860**
BH23-01	2	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**874**
BH23-01	4	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**2880**
BH23-01	4.5	10/3/2023	ND	ND	ND	110	ND	110	110	**2500**
BH24-01	6	2/1/2024	ND	ND	ND	ND	ND	ND	ND	48
BH23-02	0	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**8410**
BH23-02	2	9/8/2023	ND	ND	ND	ND	ND	ND	ND	338
BH23-02	5	9/21/2023	ND	ND	ND	ND	ND	ND	ND	265
BH23-03	0	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**1460**
BH23-03	2	9/8/2023	ND	ND	ND	ND	ND	ND	ND	166
BH23-04	0	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**8680**
BH23-04	2	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**8260**
BH23-04	4	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**1440**
BH23-05	0	9/8/2023	ND	ND	ND	ND	ND	ND	ND	**1800**
BH23-05	2	9/8/2023	ND	ND	ND	ND	ND	ND	ND	130
BH23-06	0	9/11/2023	ND	ND	ND	ND	ND	ND	ND	**620**
BH23-06	2	9/11/2023	ND	ND	ND	ND	ND	ND	ND	137

Table 4. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs and Background											
Sample Description			Petroleum Hydrocarbons								Inorganic
			Volatile		Extractable						
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH23-07	0	9/11/2023	ND	ND	ND	ND	ND	ND	ND	444
BH23-07	2	9/11/2023	ND	ND	ND	ND	ND	ND	ND	**2550**
BH23-07	3	9/11/2023	ND	ND	ND	ND	ND	ND	ND	**2040**
BH23-08	0	9/11/2023	ND	ND	ND	ND	ND	ND	ND	117
BH23-08	2	9/11/2023	ND	ND	ND	ND	ND	ND	ND	127
BH23-09	0	9/12/2023	ND	ND	ND	ND	ND	ND	ND	**26600**
BH23-09	1	9/12/2023	ND	ND	ND	ND	ND	ND	ND	**6840**
BH23-10	0	9/12/2023	ND	ND	ND	ND	ND	ND	ND	188
BH23-10	2	9/12/2023	ND	ND	ND	ND	ND	ND	ND	195
BH23-11	0	9/12/2023	ND	ND	ND	ND	ND	ND	ND	**13700**
BH23-11	2	9/14/2023	ND	ND	ND	ND	ND	ND	ND	128
BH23-11	4	9/14/2023	ND	ND	ND	ND	ND	ND	ND	**645**
BH23-11	4.5	5/13/2024	ND	ND	ND	ND	ND	ND	ND	7
BH23-12	0	9/14/2023	ND	ND	ND	ND	ND	ND	ND	**8050**
BH23-12	2	9/14/2023	ND	ND	ND	ND	ND	ND	ND	**1580**
BH23-12	4	9/14/2023	ND	ND	ND	ND	ND	ND	ND	**1130**
BH23-12	5	10/03/2023	ND	ND	ND	ND	ND	ND	ND	**3380**
BH24-12	10	2/1/2024	ND	ND	ND	ND	ND	ND	ND	67
BH23-13	0	9/14/2023	ND	ND	ND	ND	ND	ND	ND	159
BH23-13	0	9/14/2023	ND	ND	ND	ND	ND	ND	ND	158
BH23-14	0	9/14/2023	ND	ND	ND	57.6	ND	57.6	57.6	**9150**
BH23-14	2	9/14/2023	ND	ND	ND	ND	ND	ND	ND	**3830**
BH23-15	0	9/15/2023	ND	ND	ND	ND	ND	ND	ND	**1410**
BH23-15	2	9/15/2023	ND	ND	ND	ND	ND	ND	ND	130
BH23-16	0	9/15/2023	ND	ND	ND	ND	ND	ND	ND	52
BH23-16	4	9/15/2023	ND	ND	ND	ND	ND	ND	ND	94
BH23-18	0	9/15/2023	ND	ND	ND	ND	ND	ND	ND	15
BH23-18	2	9/15/2023	ND	ND	ND	ND	ND	ND	ND	66
BH23-19	0	9/15/2023	ND	ND	ND	ND	ND	ND	ND	**2640**
BH23-19	2	9/15/2023	-	-	-	-	-	-	-	-
BH23-19	0	9/18/2023	ND	ND	ND	ND	ND	ND	ND	**4260**
BH23-19	4	9/18/2023	ND	ND	ND	ND	ND	ND	ND	57
BH23-20	0	9/15/2023	ND	ND	ND	ND	ND	ND	ND	59
BH23-20	2	9/15/2023	ND	ND	ND	ND	ND	ND	ND	61
BH23-21	0	9/18/2023	ND	ND	ND	ND	ND	ND	ND	392
BH23-21	2	9/18/2023	ND	ND	ND	ND	ND	ND	ND	**713**

Table 4. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs and Background											
Sample Description			Petroleum Hydrocarbons								Inorganic
			Volatile		Extractable						
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH23-22	0	9/18/2023	ND	ND	ND	ND	ND	ND	ND	**5670**
BH23-22	2	9/18/2023	ND	ND	ND	ND	ND	ND	ND	376
BH23-22	4	9/18/2023	ND	ND	ND	ND	ND	ND	ND	447
BH23-23	0	9/18/2023	ND	ND	ND	ND	ND	ND	ND	51
BH23-23	2	9/18/2023	ND	ND	ND	ND	ND	ND	ND	150
BH23-24	0	9/18/2023	ND	ND	ND	ND	ND	ND	ND	**5400**
BH23-24	2	9/18/2023	ND	ND	ND	ND	ND	ND	ND	**2920**
BH23-25	0	9/19/2023	ND	ND	ND	ND	ND	ND	ND	118
BH23-25	2	9/19/2023	ND	ND	ND	ND	ND	ND	ND	87
BH23-26	0	9/19/2023	ND	ND	ND	ND	ND	ND	ND	106
BH23-26	2	9/19/2023	ND	ND	ND	ND	ND	ND	ND	112
BH23-27	0	9/19/2023	ND	ND	ND	ND	ND	ND	ND	**5760**
BH23-27	2	9/19/2023	ND	ND	ND	ND	ND	ND	ND	174
BH23-27	4	9/19/2023	ND	ND	ND	ND	ND	ND	ND	55
BH23-28	0	9/19/2023	ND	ND	ND	ND	ND	ND	ND	470
BH23-28	2	9/19/2023	ND	ND	ND	ND	ND	ND	ND	547
BH23-29	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	104
BH23-29	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	119
BH23-30	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	**7420**
BH23-30	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	**8490**
BH23-30	4	9/20/2023	ND	ND	ND	ND	ND	ND	ND	416
BH23-31	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	107
BH23-31	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	104
BH23-32	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	103
BH23-32	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	563
BH23-33	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	129
BH23-33	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	246
BH23-34	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	**6870**
BH23-34	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	**4500**
BH23-34	4	9/20/2023	ND	ND	ND	ND	ND	ND	ND	319
BH23-35	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	44
BH23-35	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	187
BH23-36	0	9/20/2023	ND	ND	ND	ND	ND	ND	ND	170
BH23-36	2	9/20/2023	ND	ND	ND	ND	ND	ND	ND	185
BH23-37	0	9/21/2023	ND	ND	ND	ND	ND	ND	ND	90
BH23-37	2	9/21/2023	ND	ND	ND	ND	ND	ND	ND	69
BH23-38	0	9/21/2023	ND	ND	ND	ND	ND	ND	ND	**2890**
BH23-38	2	9/21/2023	ND	ND	ND	ND	ND	ND	ND	**5880**
BH23-38	4	9/21/2023	ND	ND	ND	ND	ND	ND	ND	355
BH23-39	0	9/21/2023	ND	ND	ND	ND	ND	ND	ND	44
BH23-39	2	9/21/2023	ND	ND	ND	ND	ND	ND	ND	234

Table 4. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs and Background											
Sample Description			Petroleum Hydrocarbons							Inorganic
			Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH23-40	0	9/21/2023	ND	ND	ND	ND	ND	ND	ND	**7900**
BH23-40	2	9/21/2023	ND	ND	ND	ND	ND	ND	ND	**1160**
BH23-44	0	9/22/2023	ND	ND	ND	ND	ND	ND	ND	**757**
BH23-44	2	9/29/2023	ND	ND	ND	ND	ND	ND	ND	**1,720**
BH23-46	0	9/22/2023	ND	ND	ND	ND	ND	ND	ND	**604**
BH23-46	2	2/2/2024	ND	ND	ND	ND	ND	ND	ND	**1,270**
BH23-47	0	9/29/2023	ND	ND	ND	ND	ND	ND	ND	66
BH23-47	2	10/02/2023	ND	ND	ND	ND	ND	ND	ND	90
BH23-48	0	9/29/2023	ND	ND	ND	ND	ND	ND	ND	98
BH23-48	2	10/2/2023	ND	ND	ND	ND	ND	ND	ND	33
BH23-49	0	10/2/2023	ND	ND	ND	ND	ND	ND	ND	65
BH23-49	2	10/3/2023	ND	ND	ND	ND	ND	ND	ND	172
BH23-50	0	10/2/2023	ND	ND	ND	ND	ND	ND	ND	26
BH23-51	0	10/2/2023	ND	ND	ND	ND	ND	ND	ND	428
BH23-51	2	10/3/2023	ND	ND	ND	ND	ND	ND	ND	129
BH24-52	0	5/13/2024	ND	ND	ND	ND	ND	ND	ND	10
BH24-52	2	5/13/2024	ND	ND	ND	ND	ND	ND	ND	6

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)

ATTACHMENT 4 – Daily Field Reports

Daily Site Visit Report

Client:	Solaris Water Midstream	Inspection Date:	8/29/2023
Site Location Name:	Mobley Water Recycling Facility 2	Report Run Date:	8/29/2023 6:01 PM
Client Contact Name:	Fernando Carrasco	API #:	
Client Contact Phone #:	432-924-9416		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	8/29/2023 8:53 AM
Departed Site	8/29/2023 10:32 AM

Daily Site Visit Report

Field Notes

9:59 Arrived on site and filled out safety paperwork.

9:59 We mapped the spill polygon and other nearby infrastructure.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: North



Point of release

Viewing Direction: Northeast



Middle fingerling of spill off pad.

Viewing Direction: Southwest



Westernmost fingerling of spill off pad.

Viewing Direction: West



Spill run area between XTO lines.

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: South
	
Spill run area between XTO lines.	Westernmost extent of spill.
Viewing Direction: East	**Viewing Direction**: South
	
Central area of spill.	Spill fingerling.

Daily Site Visit Report

Viewing Direction: Northwest	**Viewing Direction**: Northeast
	
South central area of spill.	South central area of spill.
Viewing Direction: West	**Viewing Direction**: East
	
Spill next to XTO pipeline.	Point of release.

Daily Site Visit Report

Viewing Direction: North



Spill area near POR.

Viewing Direction: South



Spill area pour off into drainage in southeastern area.

Viewing Direction: South



Pour off into drainage in southeastern area.

Viewing Direction: West



Spill area in drainage under access road bridge in southern area.

Daily Site Visit Report

Viewing Direction: East



Spill underneath access road bridge in southern area.

Viewing Direction: West



Southern soil finger crossing two buried XTO lines.

Viewing Direction: Northeast



Spill over access road in central area.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Hunter Klein

Signature:



Daily Site Visit Report

Client:	Solaris Water Midstream	Inspection Date:	3/11/2024
Site Location Name:	Mobley Water Recycling Facility 2	Report Run Date:	3/11/2024 8:33 PM
Client Contact Name:	Fernando Carrasco	API #:	
Client Contact Phone #:	432-924-9416		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	3/11/2024 8:00 AM
Departed Site	3/11/2024 10:14 AM

Field Notes

10:16 Arrived on site and saw water pooled and flowing at borehole sites. Source of water appears to be coming from the ground ~100 yds upstream. Work will be held off.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: Southeast



Upstream at borehole location

Viewing Direction: South



At borehole site

Viewing Direction: Northwest



West side of bridge at borehole site

Daily Site Visit Report

Daily Site Visit Signature

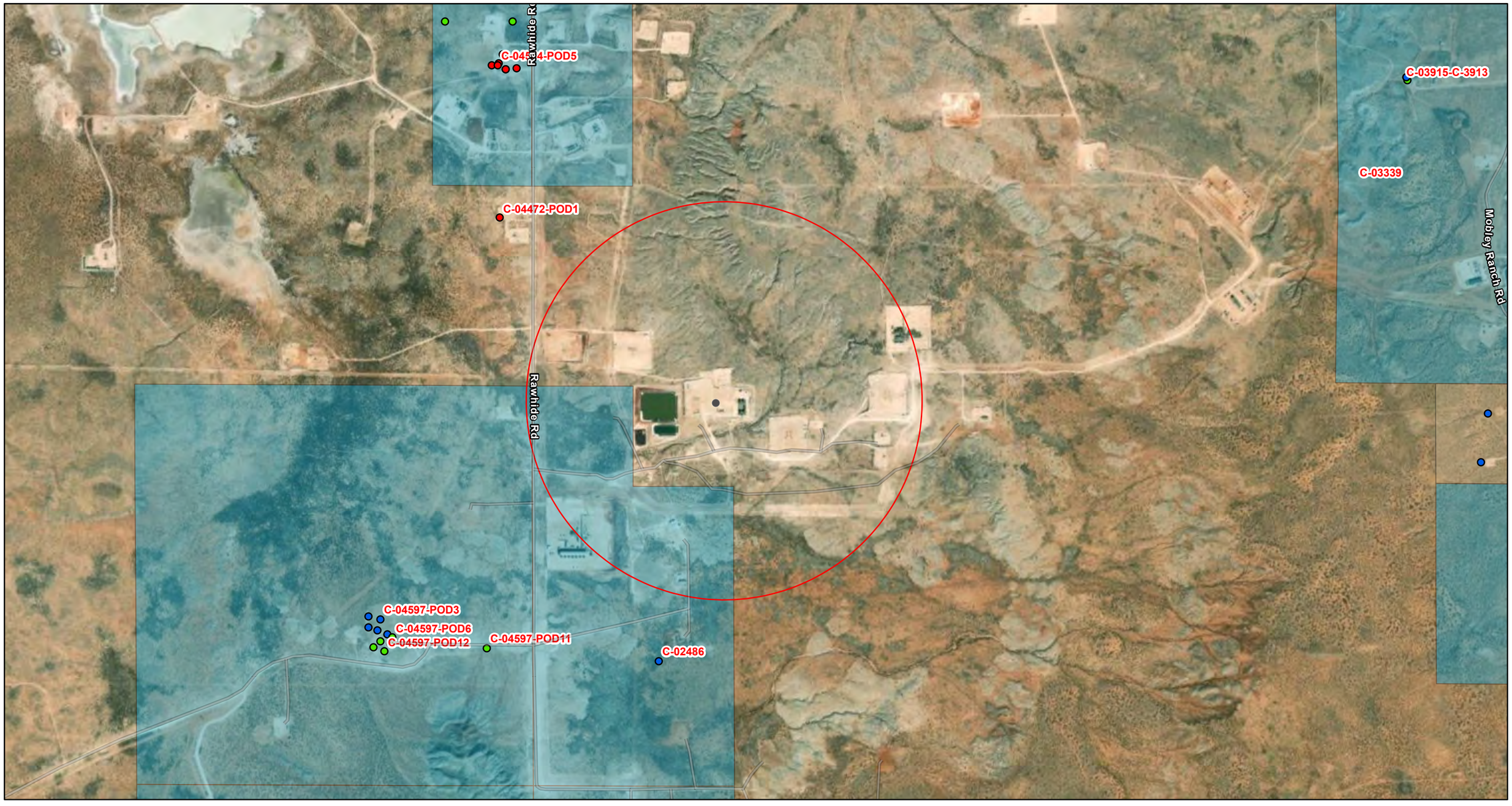
Inspector: Angela Mohle

Signature: 

Signature

ATTACHMENT 5 – Closure Criteria Research Documentation

Mobley Water Recycling Facility 2 0.5 mi Radius



9/5/2023, 4:02:12 PM

GIS WATERS PODs
- Active
- Pending
- Plugged

OSE District Boundary

SiteBoundaries

New Mexico State Trust Lands
- Subsurface Estate
- Both Estates

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau,

Online web user

This is an unofficial map from the OSE's online application.

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum) (R=POD has been replaced and no longer serves this file, C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in me

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 64	q 16	q 4	Sec	Tws	Rng	X	Y
C 02486	C	PRO	0	TEXACO EXPLORATION & PROD.	ED	C 02486					3	2	3	19	23S	30E	601304	3572832*
C 04472	CUB	MON	0	XTO ENERGY INC	ED	C 04472 POD1	NA			Shallow	2	2	4	13	23S	29E	600639	3574619
C 04597	CUB	MON	0	XTO ENERGY INC	ED	C 04597 POD11	NA				4	1	4	24	23S	29E	600606	3572878
C 04594	CUB	MON	0	KYLE LITTRELL	ED	C 04594 POD4	NA			Shallow	4	2	2	13	23S	29E	600704	3575224
					ED	C 04594 POD7				Shallow	4	2	2	13	23S	29E	600658	3575217
					ED	C 04594 POD6				Shallow	4	2	2	13	23S	29E	600658	3575220
C 04597	CUB	MON	0	XTO ENERGY INC	ED	C 04597 POD3	NA				1	1	4	24	23S	29E	600171	3572991
					ED	C 04597 POD6					4	1	4	24	23S	29E	600221	3572917
C 04594	CUB	MON	0	KYLE LITTRELL	ED	C 04594 POD5	NA			Shallow	4	2	2	13	23S	29E	600626	3575236
C 04597	CUB	MON	0	XTO ENERGY INC	ED	C 04597 POD5	NA				2	1	4	24	23S	29E	600198	3572931
C 04594	CUB	MON	0	TACOMA MORRISSEY	ED	C 04594 POD1	NA			Shallow	4	2	2	13	23S	29E	600629	3575241
					ED	C 04594 POD2				Shallow	4	2	2	13	23S	29E	600603	3575232
C 04597	CUB	MON	0	WSP USA INC	ED	C 04597 POD7	NA				4	1	4	24	23S	29E	600213	3572893
					ED	C 04597 POD1					1	1	4	24	23S	29E	600124	3573002
					ED	C 04597 POD4					1	1	4	24	23S	29E	600158	3572947
C 04594	CUB	MON	0	KYLE LITTRELL	ED	C 04594 POD3	NA			Shallow	4	2	2	13	23S	29E	600645	3575280
C 04597	CUB	MON	0	XTO ENERGY INC	ED	C 04597 POD9	NA				3	1	4	24	23S	29E	600173	3572902
					ED	C 04597 POD2					1	1	4	24	23S	29E	600122	3572959
					ED	C 04597 POD12					4	1	4	24	23S	29E	600188	3572860
					ED	C 04597 POD10					3	1	4	24	23S	29E	600145	3572875
C 04550	CUB	MON	0	WSP GLOBAL INC	ED	C 04550 POD4	NA				2	2	2	13	23S	29E	600684	3575412
					ED	C 04550 POD2					3	2	2	13	23S	29E	600389	3575323
					ED	C 04550 POD3					1	2	2	13	23S	29E	600410	3575409

Record Count: 23

UTMNAD83 Radius Search (in meters):

Easting (X): 601525 **Northing (Y):** 3573879 **Radius:** 2000

Sorted by: Distance

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

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

Released to Imaging: 3/12/2025 9:46:11 AM

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04472 POD1	2	2	4	13	23S	29E	600639	3574619

Driller License: 1249 **Driller Company:** ATKINS ENGINEERING ASSOC. INC.

Driller Name: ATKINS, JACKIE D.UELENER

Drill Start Date:	09/11/2020	**Drill Finish Date:**	09/11/2020	**Plug Date:**	09/15/2020
Log File Date:	10/06/2020	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**		**Depth Water:**	37 feet

Water Bearing Stratifications:	Top	Bottom	Description
	19	40	Limestone/Dolomite/Chalk
	40	55	Shale/Mudstone/Siltstone

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Received by OCD: 7/31/2024 4:04:52 PM

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mobley - Nearest Watercourse



April 4, 2024

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.

Released to Imaging: 3/12/2025 9:46:11 AM

Received by OCD: 7/31/2024 4:04:52 PM

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mobley - Nearest Lakebed



April 4, 2024

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.

Released to Imaging: 3/12/2025 9:46:11 AM

Mobley - Nearest Residence

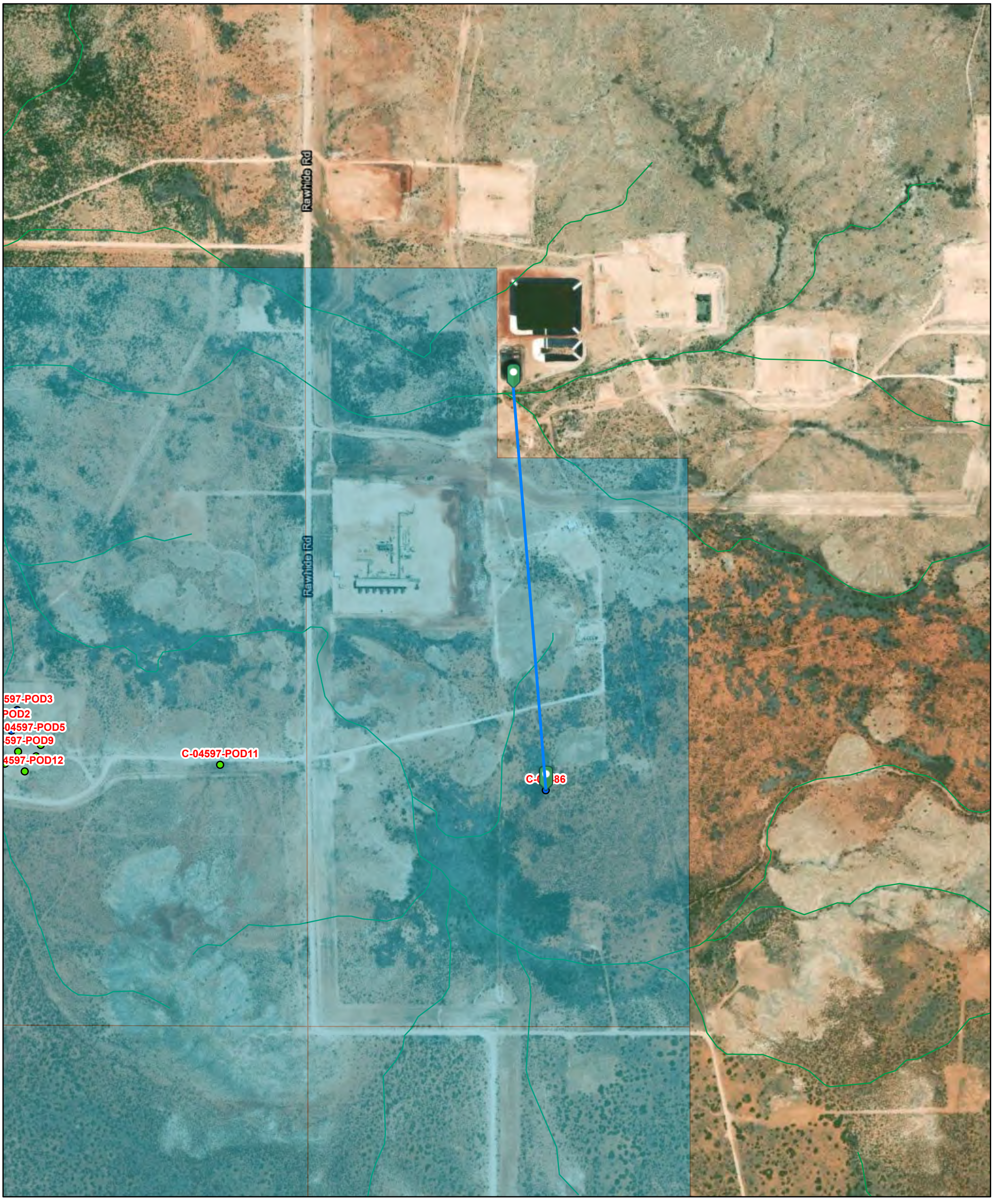
33,885 feet away

Legend

Feature 1



Mobley - Nearest Livestock Well



4/4/2024, 8:08:00 AM

Override 1

GIS WATERS PODs

Active

Pending

OSE District Boundary

Water Right Regulations

Artesian Planning Area

New Mexico State Trust Lands

Both Estates

NHD Flowlines

Connector

Stream River

1:9,028

0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar

Online web user

This is an unofficial map from the OSE's online application.

New Mexico Office of the State Engineer

Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02486	3	2	3	19	23S	30E	601304	3572832*

Driller License:	1184	**Driller Company:**	WEST TEXAS WATER WELL SERVICE		
Driller Name:	COLLIS, ROBERT E. (LD)				
Drill Start Date:	01/26/1996	**Drill Finish Date:**	01/29/1996	**Plug Date:**	
Log File Date:	03/13/1996	**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	350 feet	**Depth Water:**	

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

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

Nearest Municipality

Loving
57,210 ft (10.84 mi)

Legend

- 32.29711, -103.92169
- Longhorn Flats Hotel & RV Park (Carlsbad Area)
- Mobley Water Recycling Facility 2
- Municipality

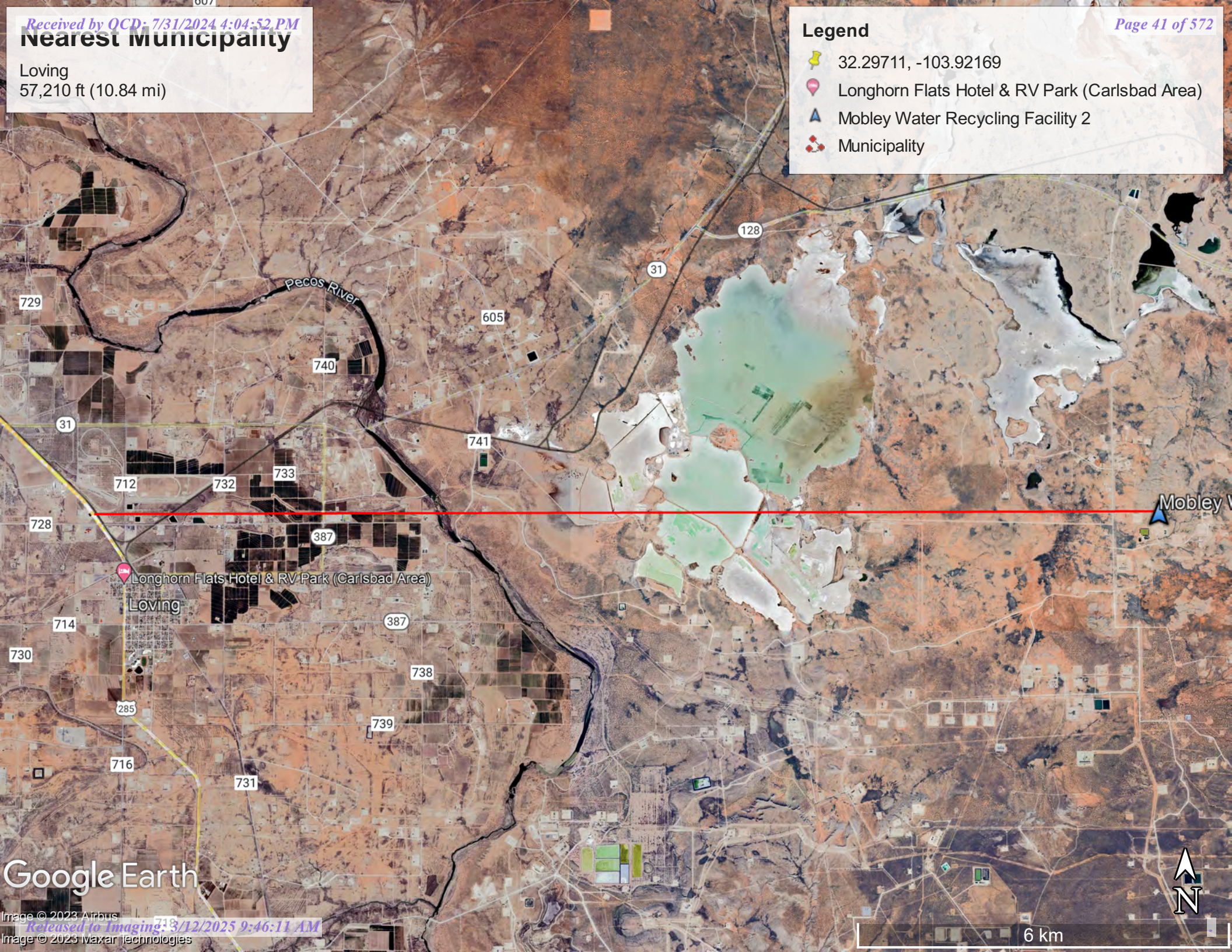


Image © 2023 Airbus
Image © 2023 Maxar Technologies

Received by OCD: 7/31/2024 4:04:52 PM

U.S. Fish and Wildlife Service
National Wetlands Inventory

Mobley - Nearest Wetland



April 4, 2024

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

Released to Imaging: 3/12/2025 9:46:11 AM

08-Mines near Mobley Water Recycling Facility 2



9/6/2023, 9:05:58 AM

1:144,448

0 1 2 4 mi

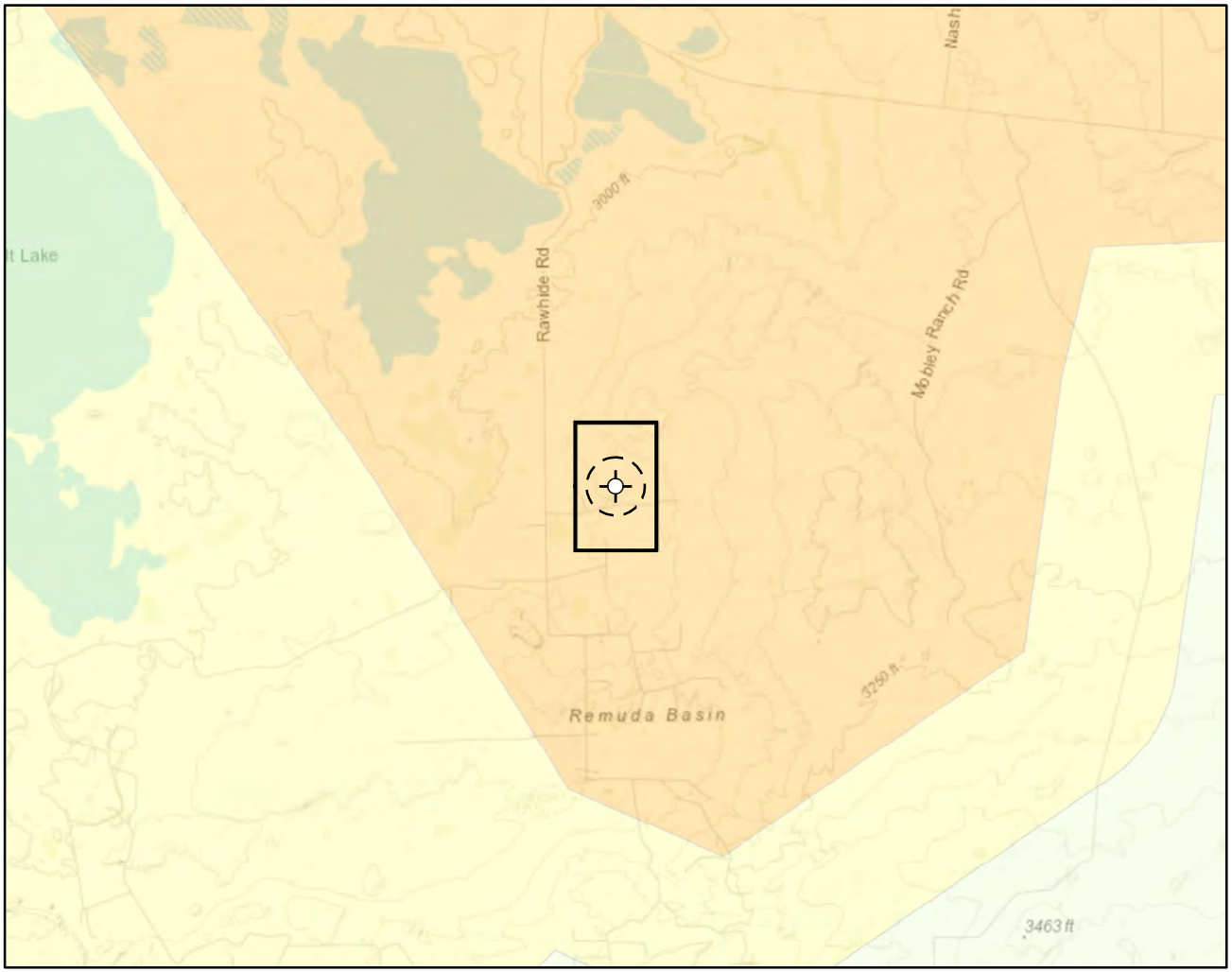
0 1.5 3 6 km

Registered Mines

- Aggregate, Stone etc.
- Potash
- Salt

Esri, HERE, Garmin, Earthstar Geographics

EMNRD MMD GIS Coordinator
New Mexico Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)





Karst Potential

- Critical
- High
- Medium
- Low

- Site location
- Buffer Location (1000 ft.)

Overview Map

0 0.25 0.5 1 mi

Detail Map

0 150 300 600 ft

VERTEX

Map Center:
Lat/Long: 32.297110, -103.921690

83 T one 3
ate ep 06 23

N

Karst Potential Map
Mobley Water Recycling Facility 2

X

SOLARIS WATER MIDSTREAM

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

ote nset ap, 2022 verview ap orld Topographi arst potential data sour ed from oswell ield ffi e, Bureau of and anagement, 2020 or nited tates epartment of the nterior, Bureau of and anagement (20 8) arst otential

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Solaris Water Midstream\23E-04909 - Mobley Wtr Recycling Falicity 2\Figure X Karst Potential Map (23E-04909).mxd

Received by OCD: 7/31/2024 4:04:52 PM

National Flood Hazard Layer FIRMette

FEMA

103°55'37"W 32°18'5"N



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

1:6,000

103°54'59"W 32°17'34"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 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 9/6/2023 at 11:33 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Eddy Area, New Mexico



September 6, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Eddy Area, New Mexico.....13
RG—Reeves-Gypsum land complex, 0 to 3 percent slopes.....13
References.....15

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	22.3	100.0%
Totals for Area of Interest		**22.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5f
Elevation: 1,250 to 5,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 190 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 55 percent
Gypsum land: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Description of Gypsum Land

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components

Largo

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Reagan

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Cottonwood

Percent of map unit: 5 percent
Ecological site: R070BC033NM - Salty Bottomland
Hydric soil rating: No

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All Ecological Sites -- —Eddy Area, New Mexico



Released to Imaging: 3/12/2025 9:46:11 AM

Received by OCD: 7/31/2024 4:04:52 PM

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- R070BC007NM
- Not rated or not available

Soil Rating Lines

- R070BC007NM
- Not rated or not available

Soil Rating Points

- R070BC007NM
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 18, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

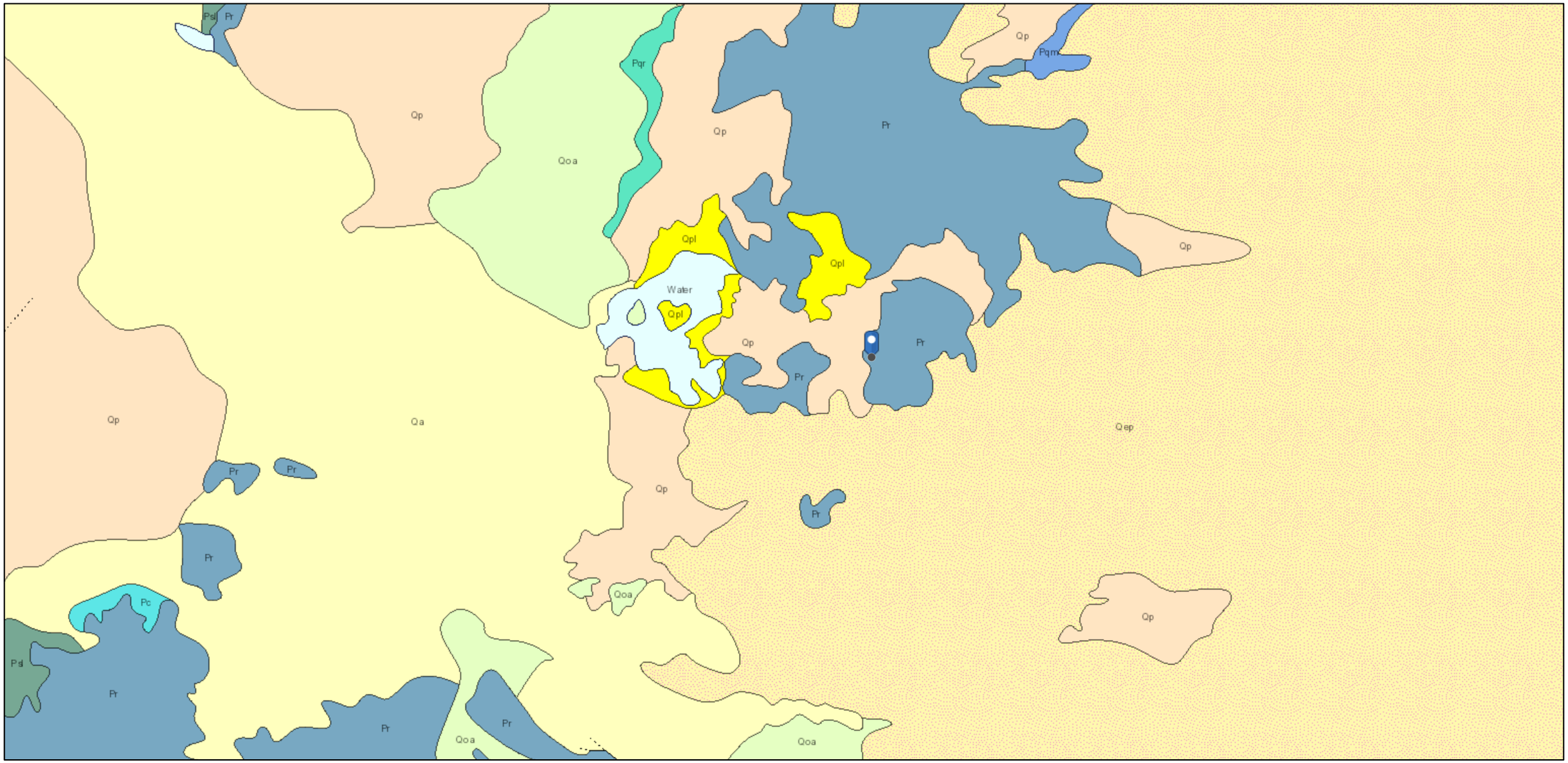
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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All Ecological Sites —

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	Reeves (55%)	R070BC007NM — Loamy	22.3	100.0%
		Gypsum land (30%)			
		Cottonwood (5%)	R070BC033NM — Salty Bottomland		
		Largo (5%)	R070BC007NM — Loamy		
		Reagan (5%)	R070BC007NM — Loamy		
Totals for Area of Interest				**22.3**	**100.0%**

Mobley Water Recycling Facility 2-Geological Map



9/6/2023, 10:18:01 AM

1:144,448

0 1.5 3 6 mi

0 2.25 4.5 9 km

Lithologic Units

- Playa——Alluvium and evaporite deposits (Holocene)
- Water——Perenial standing water
- Qa——Alluvium (Holocene to upper Pleistocene)
- Ql——Landslide deposits and colluvium (Holocene to Pleistocene) — Landslide deposits on western flanks of Socorro Mountains not shown for clarity
- Qpl——Lacustrine and playa deposits (Holocene) — Includes associated alluvial and eolian deposits of major lake basins
- Qp——Piedmont alluvial deposits (Holocene to lower Pleistocene)
- Qe——Eolian deposits (Holocene to middle Pleistocene)
- Qeg——Gypsiferous eolian deposits (Holocene to middle Pleistocene)

New Mexico Bureau of Geology and Mineral Resources, NMBGMR, BLM, Esri, NASA, NGA, USGS, NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures

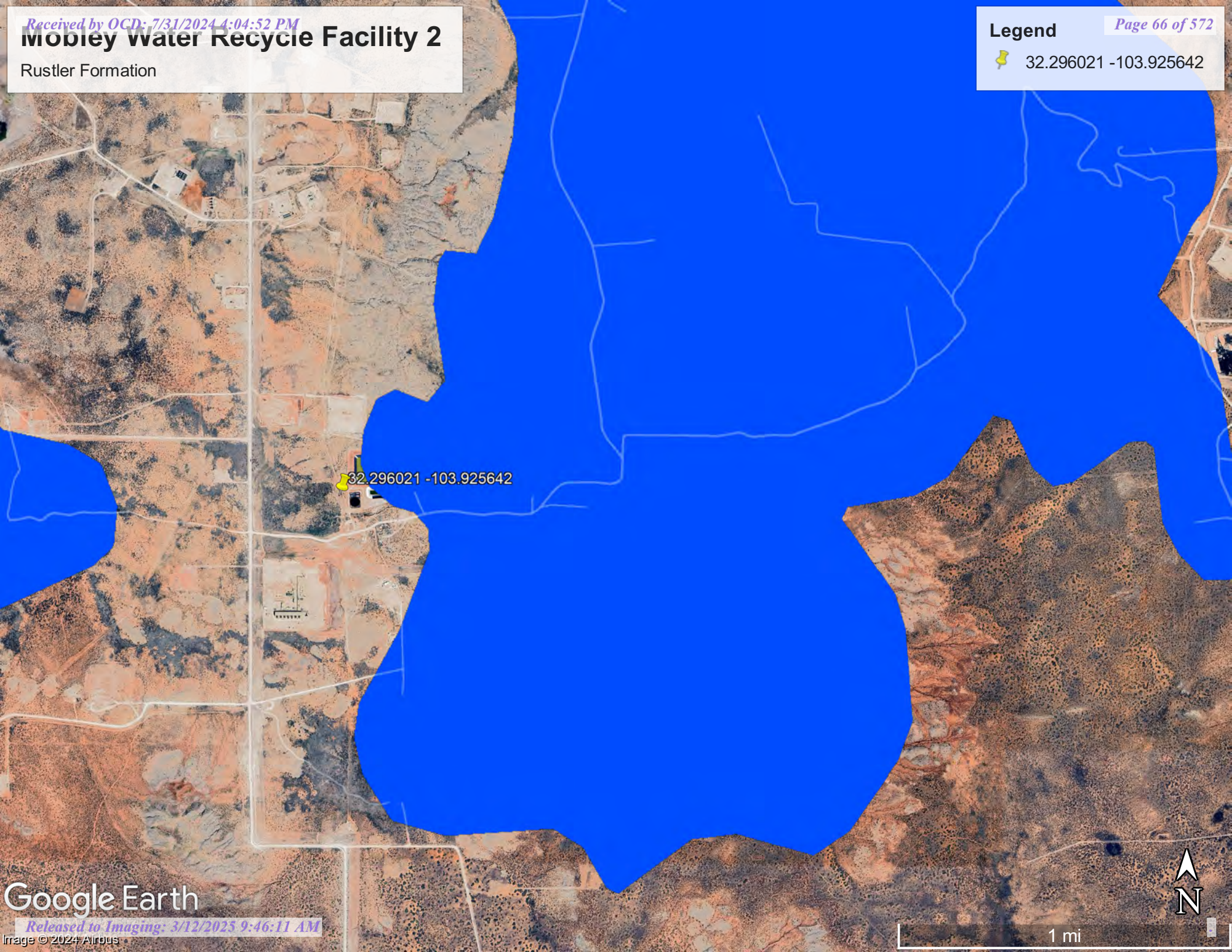
ArcGIS Web AppBuilder

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data;

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Mobley Water Recycle Facility 2

Rustler Formation



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ATTACHMENT 6 - Laboratory Analysis and Chain of Custody Forms

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 7/9/2024 11:38:43 AM

JOB DESCRIPTION

Mobley Water Recycling Facility 2

JOB NUMBER

885-6605-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

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Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Released to Imaging: 3/12/2025 9:46:11 AM

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Laboratory Job ID: 885-6605-1

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
QC Sample Results 26
QC Association Summary 32
Lab Chronicle 37
Certification Summary 44
Chain of Custody 45
Receipt Checklists 49

Definitions/Glossary

Client: Vertex Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

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: Vertex Job ID: 885-6605-1
Project: Mobley Water Recycling Facility 2

Job ID: 885-6605-1 Eurofins Albuquerque

Job Narrative
885-6605-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/20/2024 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

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

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

Diesel Range Organics
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: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 0'
Lab Sample ID: 885-6605-1
Date Collected: 06/13/24 09:00
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/20/24 13:26	06/25/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*06/20/24 13:26*	*06/25/24 14:47*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/20/24 13:26	06/25/24 14:47	1
Ethylbenzene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 14:47	1
Toluene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 14:47	1
Xylenes, Total	ND		0.099		mg/Kg		06/20/24 13:26	06/25/24 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*06/20/24 13:26*	*06/25/24 14:47*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/21/24 13:36	06/24/24 17:04	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/21/24 13:36	06/24/24 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*	*06/21/24 13:36*	*06/24/24 17:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90**		60		mg/Kg		06/21/24 09:33	06/21/24 18:32	20

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 1'
Lab Sample ID: 885-6605-2
Date Collected: 06/13/24 09:05
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/20/24 13:26	06/25/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*06/20/24 13:26*	*06/25/24 15:11*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/20/24 13:26	06/25/24 15:11	1
Ethylbenzene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 15:11	1
Toluene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 15:11	1
Xylenes, Total	ND		0.098		mg/Kg		06/20/24 13:26	06/25/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*48 - 145*	*06/20/24 13:26*	*06/25/24 15:11*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2		mg/Kg		06/21/24 13:36	06/24/24 17:38	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/21/24 13:36	06/24/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*94*		*62 - 134*	*06/21/24 13:36*	*06/24/24 17:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		60		mg/Kg		06/21/24 09:33	06/21/24 18:44	20

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 2'
Lab Sample ID: 885-6605-3
Date Collected: 06/13/24 09:10
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/20/24 13:26	06/25/24 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*35 - 166*	*06/20/24 13:26*	*06/25/24 15:35*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/20/24 13:26	06/25/24 15:35	1
Ethylbenzene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 15:35	1
Toluene	ND		0.049		mg/Kg		06/20/24 13:26	06/25/24 15:35	1
Xylenes, Total	ND		0.097		mg/Kg		06/20/24 13:26	06/25/24 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*48 - 145*	*06/20/24 13:26*	*06/25/24 15:35*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/21/24 13:36	06/24/24 17:50	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/21/24 13:36	06/24/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*87*		*62 - 134*	*06/21/24 13:36*	*06/24/24 17:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4400**		150		mg/Kg		06/21/24 09:33	06/25/24 21:39	50

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Client Sample ID: BG24-11 3'

Date Collected: 06/13/24 09:20
Date Received: 06/20/24 08:00

Lab Sample ID: 885-6605-4

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/20/24 13:26	06/25/24 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*06/20/24 13:26*	*06/25/24 15:58*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/20/24 13:26	06/25/24 15:58	1
Ethylbenzene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 15:58	1
Toluene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 15:58	1
Xylenes, Total	ND		0.094		mg/Kg		06/20/24 13:26	06/25/24 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*48 - 145*	*06/20/24 13:26*	*06/25/24 15:58*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/21/24 13:36	06/24/24 18:01	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/21/24 13:36	06/24/24 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*86*		*62 - 134*	*06/21/24 13:36*	*06/24/24 18:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		60		mg/Kg		06/21/24 15:09	06/24/24 17:55	20

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 4'
Lab Sample ID: 885-6605-5
Date Collected: 06/13/24 09:40
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/20/24 13:26	06/25/24 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*06/20/24 13:26*	*06/25/24 16:22*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		06/20/24 13:26	06/25/24 16:22	1
Ethylbenzene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 16:22	1
Toluene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 16:22	1
Xylenes, Total	ND		0.094		mg/Kg		06/20/24 13:26	06/25/24 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*06/20/24 13:26*	*06/25/24 16:22*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		06/21/24 13:36	06/24/24 18:12	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/21/24 13:36	06/24/24 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*85*		*62 - 134*	*06/21/24 13:36*	*06/24/24 18:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		150		mg/Kg		06/21/24 15:09	06/25/24 21:52	50

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 0'
Lab Sample ID: 885-6605-6
Date Collected: 06/13/24 10:00
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/20/24 13:26	06/25/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*35 - 166*	*06/20/24 13:26*	*06/25/24 17:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/20/24 13:26	06/25/24 17:09	1
Ethylbenzene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 17:09	1
Toluene	ND		0.047		mg/Kg		06/20/24 13:26	06/25/24 17:09	1
Xylenes, Total	ND		0.095		mg/Kg		06/20/24 13:26	06/25/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*06/20/24 13:26*	*06/25/24 17:09*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8		mg/Kg		06/21/24 13:36	06/24/24 18:23	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/21/24 13:36	06/24/24 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*	*06/21/24 13:36*	*06/24/24 18:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6800**		300		mg/Kg		06/21/24 15:09	06/25/24 22:04	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 1'
Lab Sample ID: 885-6605-7
Date Collected: 06/13/24 10:05
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/26/24 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/21/24 09:20*	*06/26/24 23:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/26/24 23:09	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/26/24 23:09	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/26/24 23:09	1
Xylenes, Total	ND		0.10		mg/Kg		06/21/24 09:20	06/26/24 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/26/24 23:09*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/24/24 14:36	06/25/24 22:09	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		06/24/24 14:36	06/25/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*	*06/24/24 14:36*	*06/25/24 22:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7100**		300		mg/Kg		06/21/24 15:09	06/25/24 22:17	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 2'
Lab Sample ID: 885-6605-8
Date Collected: 06/13/24 10:10
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/27/24 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/21/24 09:20*	*06/27/24 00:20*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 00:20	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 00:20	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 00:20	1
Xylenes, Total	ND		0.099		mg/Kg		06/21/24 09:20	06/27/24 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/27/24 00:20*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/24/24 14:36	06/25/24 22:23	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/24/24 14:36	06/25/24 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*	*06/24/24 14:36*	*06/25/24 22:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6200**		300		mg/Kg		06/21/24 15:09	06/25/24 22:29	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 3'
Lab Sample ID: 885-6605-9
Date Collected: 06/13/24 10:15
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/21/24 09:20	06/27/24 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*06/21/24 09:20*	*06/27/24 01:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 01:31	1
Ethylbenzene	ND		0.048		mg/Kg		06/21/24 09:20	06/27/24 01:31	1
Toluene	ND		0.048		mg/Kg		06/21/24 09:20	06/27/24 01:31	1
Xylenes, Total	ND		0.096		mg/Kg		06/21/24 09:20	06/27/24 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*06/21/24 09:20*	*06/27/24 01:31*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/24/24 14:36	06/25/24 22:36	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/24/24 14:36	06/25/24 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*111*		*62 - 134*	*06/24/24 14:36*	*06/25/24 22:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7000**		300		mg/Kg		06/21/24 15:09	06/25/24 22:41	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 4'
Lab Sample ID: 885-6605-10
Date Collected: 06/13/24 10:20
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/21/24 09:20	06/27/24 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*06/21/24 09:20*	*06/27/24 01:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 01:54	1
Ethylbenzene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 01:54	1
Toluene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 01:54	1
Xylenes, Total	ND		0.099		mg/Kg		06/21/24 09:20	06/27/24 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*48 - 145*	*06/21/24 09:20*	*06/27/24 01:54*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5		mg/Kg		06/24/24 14:36	06/25/24 22:49	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		06/24/24 14:36	06/25/24 22:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*06/24/24 14:36*	*06/25/24 22:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5900**		300		mg/Kg		06/21/24 15:09	06/25/24 22:54	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 0'
Lab Sample ID: 885-6605-11
Date Collected: 06/13/24 12:00
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/21/24 09:20	06/27/24 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/21/24 09:20*	*06/27/24 02:18*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 02:18	1
Ethylbenzene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 02:18	1
Toluene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 02:18	1
Xylenes, Total	ND		0.097		mg/Kg		06/21/24 09:20	06/27/24 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/27/24 02:18*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/24/24 14:36	06/25/24 23:02	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		06/24/24 14:36	06/25/24 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*	*06/24/24 14:36*	*06/25/24 23:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29000**		1500		mg/Kg		06/21/24 15:09	06/25/24 23:06	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 1'
Lab Sample ID: 885-6605-12
Date Collected: 06/13/24 12:10
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/27/24 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*06/21/24 09:20*	*06/27/24 02:41*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 02:41	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 02:41	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 02:41	1
Xylenes, Total	ND		0.10		mg/Kg		06/21/24 09:20	06/27/24 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*48 - 145*	*06/21/24 09:20*	*06/27/24 02:41*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9		mg/Kg		06/24/24 14:36	06/25/24 23:15	1
Motor Oil Range Organics [C28-C40]	ND		44		mg/Kg		06/24/24 14:36	06/25/24 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*06/24/24 14:36*	*06/25/24 23:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18000**		1500		mg/Kg		06/21/24 15:09	06/25/24 23:43	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 2'
Lab Sample ID: 885-6605-13
Date Collected: 06/13/24 12:15
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/21/24 09:20	06/27/24 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*06/21/24 09:20*	*06/27/24 03:05*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 03:05	1
Ethylbenzene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 03:05	1
Toluene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 03:05	1
Xylenes, Total	ND		0.098		mg/Kg		06/21/24 09:20	06/27/24 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/27/24 03:05*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.9		mg/Kg		06/24/24 14:36	06/25/24 23:28	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/24/24 14:36	06/25/24 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*06/24/24 14:36*	*06/25/24 23:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**25000**		1500		mg/Kg		06/21/24 15:09	06/25/24 23:55	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 3'
Lab Sample ID: 885-6605-14
Date Collected: 06/13/24 12:20
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/27/24 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/21/24 09:20*	*06/27/24 03:28*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 03:28	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 03:28	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 03:28	1
Xylenes, Total	ND		0.099		mg/Kg		06/21/24 09:20	06/27/24 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/27/24 03:28*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		06/24/24 14:36	06/25/24 23:41	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/24/24 14:36	06/25/24 23:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*06/24/24 14:36*	*06/25/24 23:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24000**		1500		mg/Kg		06/21/24 15:09	06/26/24 00:08	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 4'
Lab Sample ID: 885-6605-15
Date Collected: 06/13/24 12:30
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/21/24 09:20	06/27/24 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*06/21/24 09:20*	*06/27/24 03:52*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 03:52	1
Ethylbenzene	ND		0.047		mg/Kg		06/21/24 09:20	06/27/24 03:52	1
Toluene	ND		0.047		mg/Kg		06/21/24 09:20	06/27/24 03:52	1
Xylenes, Total	ND		0.095		mg/Kg		06/21/24 09:20	06/27/24 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*48 - 145*	*06/21/24 09:20*	*06/27/24 03:52*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		06/24/24 14:36	06/25/24 23:54	1
Motor Oil Range Organics [C28-C40]	ND		45		mg/Kg		06/24/24 14:36	06/25/24 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*06/24/24 14:36*	*06/25/24 23:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		150		mg/Kg		06/21/24 15:09	06/26/24 00:20	50

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 0'
Lab Sample ID: 885-6605-16
Date Collected: 06/13/24 12:40
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8		mg/Kg		06/21/24 09:20	06/27/24 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*06/21/24 09:20*	*06/27/24 04:15*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 04:15	1
Ethylbenzene	ND		0.048		mg/Kg		06/21/24 09:20	06/27/24 04:15	1
Toluene	ND		0.048		mg/Kg		06/21/24 09:20	06/27/24 04:15	1
Xylenes, Total	ND		0.096		mg/Kg		06/21/24 09:20	06/27/24 04:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*06/21/24 09:20*	*06/27/24 04:15*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		06/24/24 14:36	06/26/24 00:07	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/24/24 14:36	06/26/24 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*06/24/24 14:36*	*06/26/24 00:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8200**		300		mg/Kg		06/24/24 17:15	06/26/24 14:34	100

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 1'
Lab Sample ID: 885-6605-17
Date Collected: 06/13/24 12:50
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/27/24 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*35 - 166*	*06/21/24 09:20*	*06/27/24 05:02*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 05:02	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 05:02	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/27/24 05:02	1
Xylenes, Total	ND		0.099		mg/Kg		06/21/24 09:20	06/27/24 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*06/21/24 09:20*	*06/27/24 05:02*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/24/24 14:36	06/26/24 00:21	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/24/24 14:36	06/26/24 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*06/24/24 14:36*	*06/26/24 00:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19000**		1500		mg/Kg		06/24/24 17:15	06/26/24 14:46	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 2'
Lab Sample ID: 885-6605-18
Date Collected: 06/13/24 13:00
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		06/21/24 09:20	06/27/24 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*06/21/24 09:20*	*06/27/24 05:25*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 05:25	1
Ethylbenzene	ND		0.047		mg/Kg		06/21/24 09:20	06/27/24 05:25	1
Toluene	ND		0.047		mg/Kg		06/21/24 09:20	06/27/24 05:25	1
Xylenes, Total	ND		0.094		mg/Kg		06/21/24 09:20	06/27/24 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*06/21/24 09:20*	*06/27/24 05:25*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.9		mg/Kg		06/24/24 14:36	06/26/24 00:34	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/24/24 14:36	06/26/24 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*06/24/24 14:36*	*06/26/24 00:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28000**		1500		mg/Kg		06/24/24 17:15	06/26/24 14:59	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 3'
Lab Sample ID: 885-6605-19
Date Collected: 06/13/24 13:10
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/21/24 09:20	06/27/24 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*06/21/24 09:20*	*06/27/24 05:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/27/24 05:49	1
Ethylbenzene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 05:49	1
Toluene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 05:49	1
Xylenes, Total	ND		0.098		mg/Kg		06/21/24 09:20	06/27/24 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*06/21/24 09:20*	*06/27/24 05:49*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		06/24/24 14:36	06/26/24 00:47	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		06/24/24 14:36	06/26/24 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*96*		*62 - 134*	*06/24/24 14:36*	*06/26/24 00:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		1500		mg/Kg		06/24/24 17:15	06/26/24 15:11	500

Client Sample Results

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 4'
Lab Sample ID: 885-6605-20
Date Collected: 06/13/24 13:20
Matrix: Solid
Date Received: 06/20/24 08:00

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9		mg/Kg		06/21/24 09:20	06/27/24 06:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*06/21/24 09:20*	*06/27/24 06:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024		mg/Kg		06/21/24 09:20	06/27/24 06:12	1
Ethylbenzene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 06:12	1
Toluene	ND		0.049		mg/Kg		06/21/24 09:20	06/27/24 06:12	1
Xylenes, Total	ND		0.098		mg/Kg		06/21/24 09:20	06/27/24 06:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*06/21/24 09:20*	*06/27/24 06:12*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.5		mg/Kg		06/24/24 14:36	06/26/24 01:00	1
Motor Oil Range Organics [C28-C40]	ND		43		mg/Kg		06/24/24 14:36	06/26/24 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*06/24/24 14:36*	*06/26/24 01:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14000**		600		mg/Kg		06/24/24 17:15	06/26/24 15:48	200

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-7098/1-A
Matrix: Solid
Analysis Batch: 7389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7098

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/20/24 13:26	06/25/24 12:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*35 - 166*	*06/20/24 13:26*	*06/25/24 12:26*	*1*

Lab Sample ID: LCS 885-7098/2-A
Matrix: Solid
Analysis Batch: 7389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7098

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.9		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*202*	*S1+*	*35 - 166*

Lab Sample ID: MB 885-7156/1-A
Matrix: Solid
Analysis Batch: 7405

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7156

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		06/21/24 09:20	06/26/24 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*06/21/24 09:20*	*06/26/24 22:45*	*1*

Lab Sample ID: LCS 885-7156/2-A
Matrix: Solid
Analysis Batch: 7405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7156

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	26.4		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*213*	*S1+*	*35 - 166*

Lab Sample ID: 885-6605-7 MS
Matrix: Solid
Analysis Batch: 7405

Client Sample ID: BG24-12 1'
Prep Type: Total/NA
Prep Batch: 7156

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		24.8	23.6		mg/Kg		95	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*203*	*S1+*	*35 - 166*

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 885-6605-7 MSD
Matrix: Solid
Analysis Batch: 7405

Client Sample ID: BG24-12 1'
Prep Type: Total/NA
Prep Batch: 7156

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		24.9	23.8		mg/Kg		96	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*206*	*S1+*	*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-7098/1-A
Matrix: Solid
Analysis Batch: 7392

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7098

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/20/24 13:26	06/25/24 12:26	1
Ethylbenzene	ND		0.050		mg/Kg		06/20/24 13:26	06/25/24 12:26	1
Toluene	ND		0.050		mg/Kg		06/20/24 13:26	06/25/24 12:26	1
Xylenes, Total	ND		0.10		mg/Kg		06/20/24 13:26	06/25/24 12:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*06/20/24 13:26*	*06/25/24 12:26*	*1*

Lab Sample ID: LCS 885-7098/3-A
Matrix: Solid
Analysis Batch: 7392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7098

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.925		mg/Kg		93	70 - 130		
Ethylbenzene			1.00	0.870		mg/Kg		87	70 - 130		
m,p-Xylene			2.00	1.76		mg/Kg		88	70 - 130		
o-Xylene			1.00	0.853		mg/Kg		85	70 - 130		
Toluene			1.00	0.865		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*

Lab Sample ID: MB 885-7156/1-A
Matrix: Solid
Analysis Batch: 7406

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7156

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		06/21/24 09:20	06/26/24 22:45	1
Ethylbenzene	ND		0.050		mg/Kg		06/21/24 09:20	06/26/24 22:45	1
Toluene	ND		0.050		mg/Kg		06/21/24 09:20	06/26/24 22:45	1
Xylenes, Total	ND		0.10		mg/Kg		06/21/24 09:20	06/26/24 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*48 - 145*	*06/21/24 09:20*	*06/26/24 22:45*	*1*

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

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

Lab Sample ID: LCS 885-7156/3-A
Matrix: Solid
Analysis Batch: 7406

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7156

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.884		mg/Kg		88	70 - 130		
Ethylbenzene			1.00	0.846		mg/Kg		85	70 - 130		
m,p-Xylene			2.00	1.71		mg/Kg		85	70 - 130		
o-Xylene			1.00	0.843		mg/Kg		84	70 - 130		
Toluene			1.00	0.830		mg/Kg		83	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*

Lab Sample ID: 885-6605-8 MS
Matrix: Solid
Analysis Batch: 7406

Client Sample ID: BG24-12 2'
Prep Type: Total/NA
Prep Batch: 7156

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.990	0.757		mg/Kg		76	70 - 130		
Ethylbenzene	ND		0.990	0.723		mg/Kg		73	70 - 130		
m,p-Xylene	ND		1.98	1.48		mg/Kg		73	70 - 130		
o-Xylene	ND		0.990	0.717		mg/Kg		72	70 - 130		
Toluene	ND		0.990	0.714		mg/Kg		72	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*

Lab Sample ID: 885-6605-8 MSD
Matrix: Solid
Analysis Batch: 7406

Client Sample ID: BG24-12 2'
Prep Type: Total/NA
Prep Batch: 7156

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.989	0.801		mg/Kg		81	70 - 130	6	20
Ethylbenzene	ND		0.989	0.773		mg/Kg		78	70 - 130	7	20
m,p-Xylene	ND		1.98	1.56		mg/Kg		78	70 - 130	6	20
o-Xylene	ND		0.989	0.764		mg/Kg		77	70 - 130	6	20
Toluene	ND		0.989	0.769		mg/Kg		78	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-7184/1-A
Matrix: Solid
Analysis Batch: 7241

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7184

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/21/24 13:36	06/24/24 16:19	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/21/24 13:36	06/24/24 16:19	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 885-7184/1-A
Matrix: Solid
Analysis Batch: 7241

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7184

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134	06/21/24 13:36	06/24/24 16:19	1

Lab Sample ID: LCS 885-7184/2-A
Matrix: Solid
Analysis Batch: 7241

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7184

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	51.3		mg/Kg		103	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Di-n-octyl phthalate (Surr)	91		62 - 134

Lab Sample ID: 885-6605-1 MS
Matrix: Solid
Analysis Batch: 7241

Client Sample ID: BG24-11 0'
Prep Type: Total/NA
Prep Batch: 7184

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		38.4	40.5		mg/Kg		105	44 - 136		

Surrogate	MS %Recovery	MS Qualifier	Limits
Di-n-octyl phthalate (Surr)	92		62 - 134

Lab Sample ID: 885-6605-1 MSD
Matrix: Solid
Analysis Batch: 7241

Client Sample ID: BG24-11 0'
Prep Type: Total/NA
Prep Batch: 7184

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		48.2	49.4		mg/Kg		102	44 - 136	20	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Di-n-octyl phthalate (Surr)	91		62 - 134

Lab Sample ID: MB 885-7274/1-A
Matrix: Solid
Analysis Batch: 7313

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7274

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		06/24/24 14:36	06/25/24 19:45	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		06/24/24 14:36	06/25/24 19:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134	06/24/24 14:36	06/25/24 19:45	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 885-7274/2-A
Matrix: Solid
Analysis Batch: 7313

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	41.1		mg/Kg		82	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-7160/1-A
Matrix: Solid
Analysis Batch: 7218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7160

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		06/21/24 09:33	06/21/24 12:34	1

Lab Sample ID: LCS 885-7160/2-A
Matrix: Solid
Analysis Batch: 7218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7160

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.2		mg/Kg		94	90 - 110

Lab Sample ID: MB 885-7199/1-A
Matrix: Solid
Analysis Batch: 7238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7199

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		06/21/24 15:09	06/24/24 15:08	1

Lab Sample ID: LCS 885-7199/2-A
Matrix: Solid
Analysis Batch: 7238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.1		mg/Kg		94	90 - 110

Lab Sample ID: MB 885-7287/1-A
Matrix: Solid
Analysis Batch: 7377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 7287

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		06/24/24 17:15	06/25/24 08:18	1

Lab Sample ID: LCS 885-7287/2-A
Matrix: Solid
Analysis Batch: 7377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 7287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	13.7		mg/Kg		91	90 - 110

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling Facility 2

Job ID: 885-6605-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-7377/98
Matrix: Solid
Analysis Batch: 7377

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/Kg			06/26/24 00:45	1

Lab Sample ID: MRL 885-7377/97
Matrix: Solid
Analysis Batch: 7377

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.523		mg/L		105	50 - 150		

Lab Sample ID: MB 885-7506/77
Matrix: Solid
Analysis Batch: 7506

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/Kg			06/26/24 17:18	1

Lab Sample ID: MRL 885-7506/76
Matrix: Solid
Analysis Batch: 7506

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			0.500	0.528		mg/L		106	50 - 150		

QC Association Summary

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

GC VOA

Prep Batch: 7098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	5030C	
885-6605-2	BG24-11 1'	Total/NA	Solid	5030C	
885-6605-3	BG24-11 2'	Total/NA	Solid	5030C	
885-6605-4	BG24-11 3'	Total/NA	Solid	5030C	
885-6605-5	BG24-11 4'	Total/NA	Solid	5030C	
885-6605-6	BG24-12 0'	Total/NA	Solid	5030C	
MB 885-7098/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-7098/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-7098/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Prep Batch: 7156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-7	BG24-12 1'	Total/NA	Solid	5030C	
885-6605-8	BG24-12 2'	Total/NA	Solid	5030C	
885-6605-9	BG24-12 3'	Total/NA	Solid	5030C	
885-6605-10	BG24-12 4'	Total/NA	Solid	5030C	
885-6605-11	BG24-17 0'	Total/NA	Solid	5030C	
885-6605-12	BG24-17 1'	Total/NA	Solid	5030C	
885-6605-13	BG24-17 2'	Total/NA	Solid	5030C	
885-6605-14	BG24-17 3'	Total/NA	Solid	5030C	
885-6605-15	BG24-17 4'	Total/NA	Solid	5030C	
885-6605-16	BG24-18 0'	Total/NA	Solid	5030C	
885-6605-17	BG24-18 1'	Total/NA	Solid	5030C	
885-6605-18	BG24-18 2'	Total/NA	Solid	5030C	
885-6605-19	BG24-18 3'	Total/NA	Solid	5030C	
885-6605-20	BG24-18 4'	Total/NA	Solid	5030C	
MB 885-7156/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-7156/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-7156/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-6605-7 MS	BG24-12 1'	Total/NA	Solid	5030C	
885-6605-7 MSD	BG24-12 1'	Total/NA	Solid	5030C	
885-6605-8 MS	BG24-12 2'	Total/NA	Solid	5030C	
885-6605-8 MSD	BG24-12 2'	Total/NA	Solid	5030C	

Analysis Batch: 7389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	8015M/D	7098
885-6605-2	BG24-11 1'	Total/NA	Solid	8015M/D	7098
885-6605-3	BG24-11 2'	Total/NA	Solid	8015M/D	7098
885-6605-4	BG24-11 3'	Total/NA	Solid	8015M/D	7098
885-6605-5	BG24-11 4'	Total/NA	Solid	8015M/D	7098
885-6605-6	BG24-12 0'	Total/NA	Solid	8015M/D	7098
MB 885-7098/1-A	Method Blank	Total/NA	Solid	8015M/D	7098
LCS 885-7098/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7098

Analysis Batch: 7392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	8021B	7098
885-6605-2	BG24-11 1'	Total/NA	Solid	8021B	7098
885-6605-3	BG24-11 2'	Total/NA	Solid	8021B	7098
885-6605-4	BG24-11 3'	Total/NA	Solid	8021B	7098

QC Association Summary

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

GC VOA (Continued)

Analysis Batch: 7392 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-5	BG24-11 4'	Total/NA	Solid	8021B	7098
885-6605-6	BG24-12 0'	Total/NA	Solid	8021B	7098
MB 885-7098/1-A	Method Blank	Total/NA	Solid	8021B	7098
LCS 885-7098/3-A	Lab Control Sample	Total/NA	Solid	8021B	7098

Analysis Batch: 7405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-7	BG24-12 1'	Total/NA	Solid	8015M/D	7156
885-6605-8	BG24-12 2'	Total/NA	Solid	8015M/D	7156
885-6605-9	BG24-12 3'	Total/NA	Solid	8015M/D	7156
885-6605-10	BG24-12 4'	Total/NA	Solid	8015M/D	7156
885-6605-11	BG24-17 0'	Total/NA	Solid	8015M/D	7156
885-6605-12	BG24-17 1'	Total/NA	Solid	8015M/D	7156
885-6605-13	BG24-17 2'	Total/NA	Solid	8015M/D	7156
885-6605-14	BG24-17 3'	Total/NA	Solid	8015M/D	7156
885-6605-15	BG24-17 4'	Total/NA	Solid	8015M/D	7156
885-6605-16	BG24-18 0'	Total/NA	Solid	8015M/D	7156
885-6605-17	BG24-18 1'	Total/NA	Solid	8015M/D	7156
885-6605-18	BG24-18 2'	Total/NA	Solid	8015M/D	7156
885-6605-19	BG24-18 3'	Total/NA	Solid	8015M/D	7156
885-6605-20	BG24-18 4'	Total/NA	Solid	8015M/D	7156
MB 885-7156/1-A	Method Blank	Total/NA	Solid	8015M/D	7156
LCS 885-7156/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7156
885-6605-7 MS	BG24-12 1'	Total/NA	Solid	8015M/D	7156
885-6605-7 MSD	BG24-12 1'	Total/NA	Solid	8015M/D	7156

Analysis Batch: 7406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-7	BG24-12 1'	Total/NA	Solid	8021B	7156
885-6605-8	BG24-12 2'	Total/NA	Solid	8021B	7156
885-6605-9	BG24-12 3'	Total/NA	Solid	8021B	7156
885-6605-10	BG24-12 4'	Total/NA	Solid	8021B	7156
885-6605-11	BG24-17 0'	Total/NA	Solid	8021B	7156
885-6605-12	BG24-17 1'	Total/NA	Solid	8021B	7156
885-6605-13	BG24-17 2'	Total/NA	Solid	8021B	7156
885-6605-14	BG24-17 3'	Total/NA	Solid	8021B	7156
885-6605-15	BG24-17 4'	Total/NA	Solid	8021B	7156
885-6605-16	BG24-18 0'	Total/NA	Solid	8021B	7156
885-6605-17	BG24-18 1'	Total/NA	Solid	8021B	7156
885-6605-18	BG24-18 2'	Total/NA	Solid	8021B	7156
885-6605-19	BG24-18 3'	Total/NA	Solid	8021B	7156
885-6605-20	BG24-18 4'	Total/NA	Solid	8021B	7156
MB 885-7156/1-A	Method Blank	Total/NA	Solid	8021B	7156
LCS 885-7156/3-A	Lab Control Sample	Total/NA	Solid	8021B	7156
885-6605-8 MS	BG24-12 2'	Total/NA	Solid	8021B	7156
885-6605-8 MSD	BG24-12 2'	Total/NA	Solid	8021B	7156

QC Association Summary

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

GC Semi VOA

Prep Batch: 7184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	SHAKE	
885-6605-2	BG24-11 1'	Total/NA	Solid	SHAKE	
885-6605-3	BG24-11 2'	Total/NA	Solid	SHAKE	
885-6605-4	BG24-11 3'	Total/NA	Solid	SHAKE	
885-6605-5	BG24-11 4'	Total/NA	Solid	SHAKE	
885-6605-6	BG24-12 0'	Total/NA	Solid	SHAKE	
MB 885-7184/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-7184/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-6605-1 MS	BG24-11 0'	Total/NA	Solid	SHAKE	
885-6605-1 MSD	BG24-11 0'	Total/NA	Solid	SHAKE	

Analysis Batch: 7241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	8015M/D	7184
885-6605-2	BG24-11 1'	Total/NA	Solid	8015M/D	7184
885-6605-3	BG24-11 2'	Total/NA	Solid	8015M/D	7184
885-6605-4	BG24-11 3'	Total/NA	Solid	8015M/D	7184
885-6605-5	BG24-11 4'	Total/NA	Solid	8015M/D	7184
885-6605-6	BG24-12 0'	Total/NA	Solid	8015M/D	7184
MB 885-7184/1-A	Method Blank	Total/NA	Solid	8015M/D	7184
LCS 885-7184/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7184
885-6605-1 MS	BG24-11 0'	Total/NA	Solid	8015M/D	7184
885-6605-1 MSD	BG24-11 0'	Total/NA	Solid	8015M/D	7184

Prep Batch: 7274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-7	BG24-12 1'	Total/NA	Solid	SHAKE	
885-6605-8	BG24-12 2'	Total/NA	Solid	SHAKE	
885-6605-9	BG24-12 3'	Total/NA	Solid	SHAKE	
885-6605-10	BG24-12 4'	Total/NA	Solid	SHAKE	
885-6605-11	BG24-17 0'	Total/NA	Solid	SHAKE	
885-6605-12	BG24-17 1'	Total/NA	Solid	SHAKE	
885-6605-13	BG24-17 2'	Total/NA	Solid	SHAKE	
885-6605-14	BG24-17 3'	Total/NA	Solid	SHAKE	
885-6605-15	BG24-17 4'	Total/NA	Solid	SHAKE	
885-6605-16	BG24-18 0'	Total/NA	Solid	SHAKE	
885-6605-17	BG24-18 1'	Total/NA	Solid	SHAKE	
885-6605-18	BG24-18 2'	Total/NA	Solid	SHAKE	
885-6605-19	BG24-18 3'	Total/NA	Solid	SHAKE	
885-6605-20	BG24-18 4'	Total/NA	Solid	SHAKE	
MB 885-7274/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-7274/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 7313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-7	BG24-12 1'	Total/NA	Solid	8015M/D	7274
885-6605-8	BG24-12 2'	Total/NA	Solid	8015M/D	7274
885-6605-9	BG24-12 3'	Total/NA	Solid	8015M/D	7274
885-6605-10	BG24-12 4'	Total/NA	Solid	8015M/D	7274
885-6605-11	BG24-17 0'	Total/NA	Solid	8015M/D	7274
885-6605-12	BG24-17 1'	Total/NA	Solid	8015M/D	7274

QC Association Summary

Client: Vertex Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

GC Semi VOA (Continued)

Analysis Batch: 7313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-13	BG24-17 2'	Total/NA	Solid	8015M/D	7274
885-6605-14	BG24-17 3'	Total/NA	Solid	8015M/D	7274
885-6605-15	BG24-17 4'	Total/NA	Solid	8015M/D	7274
885-6605-16	BG24-18 0'	Total/NA	Solid	8015M/D	7274
885-6605-17	BG24-18 1'	Total/NA	Solid	8015M/D	7274
885-6605-18	BG24-18 2'	Total/NA	Solid	8015M/D	7274
885-6605-19	BG24-18 3'	Total/NA	Solid	8015M/D	7274
885-6605-20	BG24-18 4'	Total/NA	Solid	8015M/D	7274
MB 885-7274/1-A	Method Blank	Total/NA	Solid	8015M/D	7274
LCS 885-7274/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	7274

HPLC/IC

Prep Batch: 7160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	300_Prep	
885-6605-2	BG24-11 1'	Total/NA	Solid	300_Prep	
885-6605-3	BG24-11 2'	Total/NA	Solid	300_Prep	
MB 885-7160/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7160/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Prep Batch: 7199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-4	BG24-11 3'	Total/NA	Solid	300_Prep	
885-6605-5	BG24-11 4'	Total/NA	Solid	300_Prep	
885-6605-6	BG24-12 0'	Total/NA	Solid	300_Prep	
885-6605-7	BG24-12 1'	Total/NA	Solid	300_Prep	
885-6605-8	BG24-12 2'	Total/NA	Solid	300_Prep	
885-6605-9	BG24-12 3'	Total/NA	Solid	300_Prep	
885-6605-10	BG24-12 4'	Total/NA	Solid	300_Prep	
885-6605-11	BG24-17 0'	Total/NA	Solid	300_Prep	
885-6605-12	BG24-17 1'	Total/NA	Solid	300_Prep	
885-6605-13	BG24-17 2'	Total/NA	Solid	300_Prep	
885-6605-14	BG24-17 3'	Total/NA	Solid	300_Prep	
885-6605-15	BG24-17 4'	Total/NA	Solid	300_Prep	
MB 885-7199/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7199/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 7218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-1	BG24-11 0'	Total/NA	Solid	300.0	7160
885-6605-2	BG24-11 1'	Total/NA	Solid	300.0	7160
MB 885-7160/1-A	Method Blank	Total/NA	Solid	300.0	7160
LCS 885-7160/2-A	Lab Control Sample	Total/NA	Solid	300.0	7160

Analysis Batch: 7238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-4	BG24-11 3'	Total/NA	Solid	300.0	7199
MB 885-7199/1-A	Method Blank	Total/NA	Solid	300.0	7199
LCS 885-7199/2-A	Lab Control Sample	Total/NA	Solid	300.0	7199

QC Association Summary

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

HPLC/IC

Prep Batch: 7287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-16	BG24-18 0'	Total/NA	Solid	300_Prep	
885-6605-17	BG24-18 1'	Total/NA	Solid	300_Prep	
885-6605-18	BG24-18 2'	Total/NA	Solid	300_Prep	
885-6605-19	BG24-18 3'	Total/NA	Solid	300_Prep	
885-6605-20	BG24-18 4'	Total/NA	Solid	300_Prep	
MB 885-7287/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-7287/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 7377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-3	BG24-11 2'	Total/NA	Solid	300.0	7160
885-6605-5	BG24-11 4'	Total/NA	Solid	300.0	7199
885-6605-6	BG24-12 0'	Total/NA	Solid	300.0	7199
885-6605-7	BG24-12 1'	Total/NA	Solid	300.0	7199
885-6605-8	BG24-12 2'	Total/NA	Solid	300.0	7199
885-6605-9	BG24-12 3'	Total/NA	Solid	300.0	7199
885-6605-10	BG24-12 4'	Total/NA	Solid	300.0	7199
885-6605-11	BG24-17 0'	Total/NA	Solid	300.0	7199
885-6605-12	BG24-17 1'	Total/NA	Solid	300.0	7199
885-6605-13	BG24-17 2'	Total/NA	Solid	300.0	7199
885-6605-14	BG24-17 3'	Total/NA	Solid	300.0	7199
885-6605-15	BG24-17 4'	Total/NA	Solid	300.0	7199
MB 885-7287/1-A	Method Blank	Total/NA	Solid	300.0	7287
MB 885-7377/98	Method Blank	Total/NA	Solid	300.0	
LCS 885-7287/2-A	Lab Control Sample	Total/NA	Solid	300.0	7287
MRL 885-7377/97	Lab Control Sample	Total/NA	Solid	300.0	

Analysis Batch: 7506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-6605-16	BG24-18 0'	Total/NA	Solid	300.0	7287
885-6605-17	BG24-18 1'	Total/NA	Solid	300.0	7287
885-6605-18	BG24-18 2'	Total/NA	Solid	300.0	7287
885-6605-19	BG24-18 3'	Total/NA	Solid	300.0	7287
885-6605-20	BG24-18 4'	Total/NA	Solid	300.0	7287
MB 885-7506/77	Method Blank	Total/NA	Solid	300.0	
MRL 885-7506/76	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 0'
Lab Sample ID: 885-6605-1
Date Collected: 06/13/24 09:00
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 14:47
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 14:47
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 17:04
Total/NA	Prep	300_Prep			7160	SS	EET ALB	06/21/24 09:33
Total/NA	Analysis	300.0		20	7218	RC	EET ALB	06/21/24 18:32

Client Sample ID: BG24-11 1'
Lab Sample ID: 885-6605-2
Date Collected: 06/13/24 09:05
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 15:11
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 15:11
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 17:38
Total/NA	Prep	300_Prep			7160	SS	EET ALB	06/21/24 09:33
Total/NA	Analysis	300.0		20	7218	RC	EET ALB	06/21/24 18:44

Client Sample ID: BG24-11 2'
Lab Sample ID: 885-6605-3
Date Collected: 06/13/24 09:10
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 15:35
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 15:35
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 17:50
Total/NA	Prep	300_Prep			7160	SS	EET ALB	06/21/24 09:33
Total/NA	Analysis	300.0		50	7377	JT	EET ALB	06/25/24 21:39

Client Sample ID: BG24-11 3'
Lab Sample ID: 885-6605-4
Date Collected: 06/13/24 09:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 15:58

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-11 3'
Lab Sample ID: 885-6605-4
Date Collected: 06/13/24 09:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 15:58
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 18:01
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		20	7238	RC	EET ALB	06/24/24 17:55

Client Sample ID: BG24-11 4'
Lab Sample ID: 885-6605-5
Date Collected: 06/13/24 09:40
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 16:22
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 16:22
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 18:12
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		50	7377	JT	EET ALB	06/25/24 21:52

Client Sample ID: BG24-12 0'
Lab Sample ID: 885-6605-6
Date Collected: 06/13/24 10:00
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8015M/D		1	7389	JP	EET ALB	06/25/24 17:09
Total/NA	Prep	5030C			7098	AT	EET ALB	06/20/24 13:26
Total/NA	Analysis	8021B		1	7392	JP	EET ALB	06/25/24 17:09
Total/NA	Prep	SHAKE			7184	SB	EET ALB	06/21/24 13:36
Total/NA	Analysis	8015M/D		1	7241	PD	EET ALB	06/24/24 18:23
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		100	7377	JT	EET ALB	06/25/24 22:04

Client Sample ID: BG24-12 1'
Lab Sample ID: 885-6605-7
Date Collected: 06/13/24 10:05
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/26/24 23:09
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/26/24 23:09

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 1'
Lab Sample ID: 885-6605-7
Date Collected: 06/13/24 10:05
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 22:09
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		100	7377	JT	EET ALB	06/25/24 22:17

Client Sample ID: BG24-12 2'
Lab Sample ID: 885-6605-8
Date Collected: 06/13/24 10:10
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 00:20
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 00:20
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 22:23
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		100	7377	JT	EET ALB	06/25/24 22:29

Client Sample ID: BG24-12 3'
Lab Sample ID: 885-6605-9
Date Collected: 06/13/24 10:15
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 01:31
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 01:31
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 22:36
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		100	7377	JT	EET ALB	06/25/24 22:41

Client Sample ID: BG24-12 4'
Lab Sample ID: 885-6605-10
Date Collected: 06/13/24 10:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 01:54
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 01:54
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 22:49

Lab Chronicle

Client: Vertex Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-12 4' Lab Sample ID: 885-6605-10

Date Collected: 06/13/24 10:20 **Matrix: Solid**
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		100	7377	JT	EET ALB	06/25/24 22:54

Client Sample ID: BG24-17 0' Lab Sample ID: 885-6605-11

Date Collected: 06/13/24 12:00 **Matrix: Solid**
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 02:18
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 02:18
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 23:02
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		500	7377	JT	EET ALB	06/25/24 23:06

Client Sample ID: BG24-17 1' Lab Sample ID: 885-6605-12

Date Collected: 06/13/24 12:10 **Matrix: Solid**
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 02:41
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 02:41
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 23:15
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		500	7377	JT	EET ALB	06/25/24 23:43

Client Sample ID: BG24-17 2' Lab Sample ID: 885-6605-13

Date Collected: 06/13/24 12:15 **Matrix: Solid**
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 03:05
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 03:05
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 23:28
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		500	7377	JT	EET ALB	06/25/24 23:55

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-17 3'
Lab Sample ID: 885-6605-14
Date Collected: 06/13/24 12:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 03:28
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 03:28
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 23:41
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		500	7377	JT	EET ALB	06/26/24 00:08

Client Sample ID: BG24-17 4'
Lab Sample ID: 885-6605-15
Date Collected: 06/13/24 12:30
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 03:52
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 03:52
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/25/24 23:54
Total/NA	Prep	300_Prep			7199	RC	EET ALB	06/21/24 15:09
Total/NA	Analysis	300.0		50	7377	JT	EET ALB	06/26/24 00:20

Client Sample ID: BG24-18 0'
Lab Sample ID: 885-6605-16
Date Collected: 06/13/24 12:40
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 04:15
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 04:15
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/26/24 00:07
Total/NA	Prep	300_Prep			7287	MA	EET ALB	06/24/24 17:15
Total/NA	Analysis	300.0		100	7506	SS	EET ALB	06/26/24 14:34

Client Sample ID: BG24-18 1'
Lab Sample ID: 885-6605-17
Date Collected: 06/13/24 12:50
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 05:02

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 1'
Lab Sample ID: 885-6605-17
Date Collected: 06/13/24 12:50
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 05:02
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/26/24 00:21
Total/NA	Prep	300_Prep			7287	MA	EET ALB	06/24/24 17:15
Total/NA	Analysis	300.0		500	7506	SS	EET ALB	06/26/24 14:46

Client Sample ID: BG24-18 2'
Lab Sample ID: 885-6605-18
Date Collected: 06/13/24 13:00
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 05:25
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 05:25
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/26/24 00:34
Total/NA	Prep	300_Prep			7287	MA	EET ALB	06/24/24 17:15
Total/NA	Analysis	300.0		500	7506	SS	EET ALB	06/26/24 14:59

Client Sample ID: BG24-18 3'
Lab Sample ID: 885-6605-19
Date Collected: 06/13/24 13:10
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 05:49
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 05:49
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/26/24 00:47
Total/NA	Prep	300_Prep			7287	MA	EET ALB	06/24/24 17:15
Total/NA	Analysis	300.0		500	7506	SS	EET ALB	06/26/24 15:11

Client Sample ID: BG24-18 4'
Lab Sample ID: 885-6605-20
Date Collected: 06/13/24 13:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8015M/D		1	7405	JP	EET ALB	06/27/24 06:12
Total/NA	Prep	5030C			7156	AT	EET ALB	06/21/24 09:20
Total/NA	Analysis	8021B		1	7406	JP	EET ALB	06/27/24 06:12

Lab Chronicle

Client: Vertex
Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Client Sample ID: BG24-18 4'
Lab Sample ID: 885-6605-20

Date Collected: 06/13/24 13:20
Matrix: Solid
Date Received: 06/20/24 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			7274	KR	EET ALB	06/24/24 14:36
Total/NA	Analysis	8015M/D		1	7313	DH	EET ALB	06/26/24 01:00
Total/NA	Prep	300_Prep			7287	MA	EET ALB	06/24/24 17:15
Total/NA	Analysis	300.0		200	7506	SS	EET ALB	06/26/24 15:48

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex Job ID: 885-6605-1
Project/Site: Mobley Water Recycling Facility 2

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25

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
300.0	300_Prep	Solid	Chloride
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Oregon	NELAP	NM100001	02-26-25

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

Chain-of-Custody Record

Client: **Vertex (bill to Solaris)**

Mailing Address: (On File)

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☑ Rush 5 Day

Project Name:
Mobley Water Recycling Facility 2

Project #:
23E-04909

Project Manager:
Chance Dixon
Cdixon@vertexresource.com

Sampler: J. Rewis
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 1.3 ±0 = 1.3 °C

HALL ENVIRONMENTAL ANALYSIS LABO
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87
Tel. 505-345-3975 Fax 505-345-410

885-6605 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)						
6.13.24	9:00	Soil	BG24-11 0'	1, 4oz jar	Ice	1	X	X					X									
6.13.24	9:05	Soil	BG24-11 1'	1, 4oz jar	Ice	2	X	X					X									
6.13.24	9:10	Soil	BG24-11 2'	1, 4oz jar	Ice	3	X	X					X									
6.13.24	9:20	Soil	BG24-11 3'	1, 4oz jar	Ice	4	X	X					X									
6.13.24	9:40	Soil	BG24-11 4'	1, 4oz jar	Ice	5	X	X					X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
					6/19/24	805
6/19/24	900			courier		
					6/20/24	8:20

Remarks:
Direct Bill to Solaris Midstream Water Compnay
CC.Cdixon@vertexresource.com for Final Report.

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.

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Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY 2/4

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: **Vertex (bill to Solaris)**

Mailing Address: (On File)

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

☑ Standard ☑ Rush 5 Days

Project Name:

Mobley Water Recycling Facility 2

Project #:

23E-04909

Project Manager:

Chance Dixon

Cdixon@vertexresource.com

Sampler: J. Rewis

On Ice: ☑ Yes ☐ No 4.0g

# of Coolers: 1

Cooler Temp(including CF): 1.3 +0 = 1.3 °C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)						
6.13.24	10:00	Soil	BG24-12 0'	1, 4oz jar	Ice	6	X	X					X									
6.13.24	10:05	Soil	BG24-12 1'	1, 4oz jar	Ice	7	X	X					X									
6.13.24	10:10	Soil	BG24-12 2'	1, 4oz jar	Ice	8	X	X					X									
6.13.24	10:15	Soil	BG24-12 3'	1, 4oz jar	Ice	9	X	X					X									
6.13.24	10:20	Soil	BG24-12 4'	1, 4oz jar	Ice	10	X	X					X									

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
					6/19/24	805
6/19/24	1900			courier	6/20/24	800

Remarks:
Direct Bill to Solaris Midstream Water Compnay
CC.Cdixon@vertexresource.com for Final Report.

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☐ NELAC ☐ Other

☐ EDD (Type)

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Project Name:
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Project #:
23E-04909

Project Manager:
Chance Dixon
Cdixon@vertexresource.com

Sampler: J. Rewis
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 1.3 +0= 1.3 °C

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www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

3/4

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
6.13.24	12:00	Soil	BG24-17 0'	1, 4oz jar	Ice	11	X	X					X			
6.13.24	12:10	Soil	BG24-17 1'	1, 4oz jar	Ice	12	X	X					X			
6.13.24	12:15	Soil	BG24-17 2'	1, 4oz jar	Ice	13	X	X					X			
6.13.24	12:20	Soil	BG24-17 3'	1, 4oz jar	Ice	14	X	X					X			
6.13.24	12:30	Soil	BG24-17 4'	1, 4oz jar	Ice	15	X	X					X			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
			[signature]		6/19/24	0805
6/19/24	1900	[signature]		courier	6/20/24	8:00

Remarks:
Direct Bill to Solaris Midstream Water Compnay
CC.Cdixon@vertexresource.com for Final Report.

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Chain-of-Custody Record

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: **Vertex (bill to Solaris)**

Mailing Address: (On File)

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☑ Standard ☑ Rush 5 Day

Project Name:

Mobley Water Recycling Facility 2

Project #:

23E-04909

Project Manager:

Chance Dixon

Cdixon@vertexresource.com

Sampler: J. Rewis

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.3 + 0 = 1.3°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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)
6.13.24	12:40	Soil	BG24-18 0'	1, 4oz jar	Ice	16	X	X					X			
6.13.24	12:50	Soil	BG24-18 1'	1, 4oz jar	Ice	17	X	X					X			
6.13.24	13:00	Soil	BG24-18 2'	1, 4oz jar	Ice	18	X	X					X			
6.13.24	13:10	Soil	BG24-18 3'	1, 4oz jar	Ice	19	X	X					X			
6.13.24	13:20	Soil	BG24-18 4'	1, 4oz jar	Ice	20	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
					6/19/24	805
Date: 6/19/24	Time: 1900	Relinquished by:	Received by:	Via Courier	Date 6/20/24	Time 8:00

Remarks:
Direct Bill to Solaris Midstream Water Compnay
CC.Cdixon@vertexresource.com for Final Report.

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Login Sample Receipt Checklist

Client: Vertex Job Number: 885-6605-1

Login Number: 6605 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 9/13/2023 1:00:53 PM

JOB DESCRIPTION

Mobley Water Recycle 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5213-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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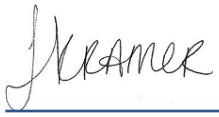
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/13/2023 1:00:53 PM

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

Client: Vertex
Project/Site: Mobley Water Recycle 2

Laboratory Job ID: 890-5213-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 17
Certification Summary 19
Method Summary 20
Sample Summary 21
Chain of Custody 22
Receipt Checklists 24

Eurofins Carlsbad
9/13/2023

Definitions/Glossary

Client: Vertex Job ID: 890-5213-1
Project/Site: Mobley Water Recycle 2 SDG: 23E-04909

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Job ID: 890-5213-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5213-1

Receipt
The samples were received on 9/7/2023 10:16 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BG23-01 0' (890-5213-1), BG23-01 1' (890-5213-2), BG23-01 2' (890-5213-3), BG23-01 3' (890-5213-4) and BG23-01 4' (890-5213-5).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62070 and analytical batch 880-62115 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62070 and analytical batch 880-62115 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BG23-01 1' (890-5213-2), BG23-01 2' (890-5213-3) and BG23-01 4' (890-5213-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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 880-62104 and analytical batch 880-62025 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BG23-01 0' (890-5213-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62025/31), (CCV 880-62025/47) and (CCV 880-62025/58). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62154 and 880-62154 and analytical batch 880-62337 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 0'

Lab Sample ID: 890-5213-1
Matrix: Solid
Date Collected: 09/06/23 14:09
Date Received: 09/07/23 10:16
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 10:24	09/09/23 23:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 10:24	09/09/23 23:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*09/08/23 10:24*	*09/09/23 23:07*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*09/08/23 10:24*	*09/09/23 23:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/11/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/09/23 01:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/09/23 01:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/09/23 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/09/23 01:06*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/08/23 15:19*	*09/09/23 01:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**79.2**		4.97		mg/Kg			09/13/23 07:45	1

Client Sample ID: BG23-01 1'

Lab Sample ID: 890-5213-2
Matrix: Solid
Date Collected: 09/06/23 14:25
Date Received: 09/07/23 10:16
Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/08/23 10:24	09/09/23 23:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/08/23 10:24	09/09/23 23:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 23:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/08/23 10:24*	*09/09/23 23:27*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 1'

Date Collected: 09/06/23 14:25
Date Received: 09/07/23 10:16
Sample Depth: 1

Lab Sample ID: 890-5213-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*57*	*S1-*	*70 - 130*	*09/08/23 10:24*	*09/09/23 23:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 01:28	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 01:28	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/08/23 15:19	09/09/23 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*09/08/23 15:19*	*09/09/23 01:28*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/08/23 15:19*	*09/09/23 01:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.3**		5.00		mg/Kg			09/13/23 07:52	1

Client Sample ID: BG23-01 2'

Date Collected: 09/06/23 14:32
Date Received: 09/07/23 10:16
Sample Depth: 2

Lab Sample ID: 890-5213-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/08/23 10:24	09/09/23 23:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/08/23 10:24	09/09/23 23:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/08/23 10:24	09/09/23 23:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/08/23 10:24	09/09/23 23:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/08/23 10:24	09/09/23 23:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/08/23 10:24	09/09/23 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/08/23 10:24*	*09/09/23 23:47*	*1*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*09/08/23 10:24*	*09/09/23 23:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/11/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/11/23 09:54	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 2'

Lab Sample ID: 890-5213-3
Matrix: Solid
Date Collected: 09/06/23 14:32
Date Received: 09/07/23 10:16
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/08/23 15:19	09/09/23 01:50	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/08/23 15:19	09/09/23 01:50	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/08/23 15:19	09/09/23 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*09/08/23 15:19*	*09/09/23 01:50*	*1*
o-Terphenyl	*107*		*70 - 130*	*09/08/23 15:19*	*09/09/23 01:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**574**		25.2		mg/Kg			09/13/23 07:58	5

Client Sample ID: BG23-01 3'

Lab Sample ID: 890-5213-4
Matrix: Solid
Date Collected: 09/06/23 14:38
Date Received: 09/07/23 10:16
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/08/23 10:24	09/10/23 00:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/08/23 10:24	09/10/23 00:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/08/23 10:24	09/10/23 00:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/08/23 10:24	09/10/23 00:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/08/23 10:24	09/10/23 00:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/08/23 10:24	09/10/23 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/08/23 10:24*	*09/10/23 00:08*	*1*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*09/08/23 10:24*	*09/10/23 00:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/08/23 15:19	09/09/23 02:35	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/08/23 15:19	09/09/23 02:35	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/08/23 15:19	09/09/23 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*09/08/23 15:19*	*09/09/23 02:35*	*1*
o-Terphenyl	*102*		*70 - 130*	*09/08/23 15:19*	*09/09/23 02:35*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 3'

Lab Sample ID: 890-5213-4
Matrix: Solid
Date Collected: 09/06/23 14:38
Date Received: 09/07/23 10:16
Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	970		25.1		mg/Kg			09/13/23 08:05	5

Client Sample ID: BG23-01 4'

Lab Sample ID: 890-5213-5
Matrix: Solid
Date Collected: 09/06/23 14:45
Date Received: 09/07/23 10:16
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/08/23 10:24	09/10/23 00:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/08/23 10:24	09/10/23 00:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/08/23 10:24	09/10/23 00:28	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/08/23 10:24	09/10/23 00:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/08/23 10:24	09/10/23 00:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/08/23 10:24	09/10/23 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/08/23 10:24*	*09/10/23 00:28*	*1*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/08/23 10:24*	*09/10/23 00:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/11/23 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/11/23 09:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/08/23 15:19	09/09/23 02:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/08/23 15:19	09/09/23 02:58	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/08/23 15:19	09/09/23 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*09/08/23 15:19*	*09/09/23 02:58*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/08/23 15:19*	*09/09/23 02:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	989		25.1		mg/Kg			09/13/23 08:12	5

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

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)
880-33026-A-10-B MS	Matrix Spike	122	94
880-33026-A-10-C MSD	Matrix Spike Duplicate	116	107
890-5213-1	BG23-01 0'	75	70
890-5213-2	BG23-01 1'	105	57 S1-
890-5213-3	BG23-01 2'	83	66 S1-
890-5213-4	BG23-01 3'	83	72
890-5213-5	BG23-01 4'	85	69 S1-
LCS 880-62070/1-A	Lab Control Sample	112	113
LCSD 880-62070/2-A	Lab Control Sample Dup	112	109
MB 880-62070/5-A	Method Blank	65 S1-	99

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)
880-32940-A-27-E MS	Matrix Spike	126	97
880-32940-A-27-F MSD	Matrix Spike Duplicate	126	97
890-5213-1	BG23-01 0'	138 S1+	123
890-5213-2	BG23-01 1'	116	99
890-5213-3	BG23-01 2'	123	107
890-5213-4	BG23-01 3'	114	102
890-5213-5	BG23-01 4'	104	90
LCS 880-62104/2-A	Lab Control Sample	97	99
LCSD 880-62104/3-A	Lab Control Sample Dup	99	94
MB 880-62104/1-A	Method Blank	160 S1+	148 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62070/5-A
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 21:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 21:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 21:02	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/08/23 10:24	09/09/23 21:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/08/23 10:24	09/09/23 21:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/08/23 10:24	09/09/23 21:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*09/08/23 10:24*	*09/09/23 21:02*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/08/23 10:24*	*09/09/23 21:02*	*1*

Lab Sample ID: LCS 880-62070/1-A
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62070

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07799		mg/Kg		78	70 - 130		
Ethylbenzene			0.100	0.08507		mg/Kg		85	70 - 130		
Toluene			0.100	0.08423		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1799		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09244		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-62070/2-A
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62070

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08469		mg/Kg		85	70 - 130	8	35
Ethylbenzene			0.100	0.09064		mg/Kg		91	70 - 130	6	35
Toluene			0.100	0.09119		mg/Kg		91	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1924		mg/Kg		96	70 - 130	7	35
o-Xylene			0.100	0.09812		mg/Kg		98	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-33026-A-10-B MS
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F1	0.0998	0.07570		mg/Kg		76	70 - 130		
Ethylbenzene	<0.00198	U F1 F2	0.0998	0.05039	F1	mg/Kg		50	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

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

Lab Sample ID: 880-33026-A-10-B MS
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00198	U F1 F2	0.0998	0.05216	F1	mg/Kg		52	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1 F2	0.200	0.1071	F1	mg/Kg		54	70 - 130
o-Xylene	<0.00198	U F1	0.0998	0.06311	F1	mg/Kg		63	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-33026-A-10-C MSD
Matrix: Solid
Analysis Batch: 62115

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62070

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.06113	F1	mg/Kg		61	70 - 130	21	35
Ethylbenzene	<0.00198	U F1 F2	0.100	0.03303	F1 F2	mg/Kg		33	70 - 130	42	35
Toluene	<0.00198	U F1 F2	0.100	0.02942	F1 F2	mg/Kg		29	70 - 130	56	35
m-Xylene & p-Xylene	<0.00396	U F1 F2	0.200	0.06880	F1 F2	mg/Kg		34	70 - 130	44	35
o-Xylene	<0.00198	U F1	0.100	0.04659	F1	mg/Kg		46	70 - 130	30	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-62104/1-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62104

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/08/23 20:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/08/23 20:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/08/23 15:19	09/08/23 20:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*160*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/08/23 20:37*	*1*
o-Terphenyl	*148*	*S1+*	*70 - 130*	*09/08/23 15:19*	*09/08/23 20:37*	*1*

Lab Sample ID: LCS 880-62104/2-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1039		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1048		mg/Kg		105	70 - 130

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QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

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

Lab Sample ID: LCS 880-62104/2-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62104

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-62104/3-A
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	981.8		mg/Kg		98	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	985.2		mg/Kg		99	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-32940-A-27-E MS
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	993	911.7		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	56.9		993	1092		mg/Kg		104	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 880-32940-A-27-F MSD
Matrix: Solid
Analysis Batch: 62025

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62104

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	993	911.4		mg/Kg		88	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	56.9		993	1095		mg/Kg		105	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	97		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62154/1-A
Matrix: Solid
Analysis Batch: 62337

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		mg/Kg			09/13/23 04:58	1

Lab Sample ID: LCS 880-62154/2-A
Matrix: Solid
Analysis Batch: 62337

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.0		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-62154/3-A
Matrix: Solid
Analysis Batch: 62337

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	247.1		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-33015-A-10-D MS
Matrix: Solid
Analysis Batch: 62337

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	132	F1	251	405.4		mg/Kg		109	90 - 110		

Lab Sample ID: 880-33015-A-10-E MSD
Matrix: Solid
Analysis Batch: 62337

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	132	F1	251	411.0	F1	mg/Kg		112	90 - 110	1	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

GC VOA

Prep Batch: 62070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	5035	
890-5213-2	BG23-01 1'	Total/NA	Solid	5035	
890-5213-3	BG23-01 2'	Total/NA	Solid	5035	
890-5213-4	BG23-01 3'	Total/NA	Solid	5035	
890-5213-5	BG23-01 4'	Total/NA	Solid	5035	
MB 880-62070/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62070/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62070/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33026-A-10-B MS	Matrix Spike	Total/NA	Solid	5035	
880-33026-A-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 62115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	8021B	62070
890-5213-2	BG23-01 1'	Total/NA	Solid	8021B	62070
890-5213-3	BG23-01 2'	Total/NA	Solid	8021B	62070
890-5213-4	BG23-01 3'	Total/NA	Solid	8021B	62070
890-5213-5	BG23-01 4'	Total/NA	Solid	8021B	62070
MB 880-62070/5-A	Method Blank	Total/NA	Solid	8021B	62070
LCS 880-62070/1-A	Lab Control Sample	Total/NA	Solid	8021B	62070
LCSD 880-62070/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62070
880-33026-A-10-B MS	Matrix Spike	Total/NA	Solid	8021B	62070
880-33026-A-10-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62070

Analysis Batch: 62188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	Total BTEX	
890-5213-2	BG23-01 1'	Total/NA	Solid	Total BTEX	
890-5213-3	BG23-01 2'	Total/NA	Solid	Total BTEX	
890-5213-4	BG23-01 3'	Total/NA	Solid	Total BTEX	
890-5213-5	BG23-01 4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 62025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	8015B NM	62104
890-5213-2	BG23-01 1'	Total/NA	Solid	8015B NM	62104
890-5213-3	BG23-01 2'	Total/NA	Solid	8015B NM	62104
890-5213-4	BG23-01 3'	Total/NA	Solid	8015B NM	62104
890-5213-5	BG23-01 4'	Total/NA	Solid	8015B NM	62104
MB 880-62104/1-A	Method Blank	Total/NA	Solid	8015B NM	62104
LCS 880-62104/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62104
LCSD 880-62104/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62104
880-32940-A-27-E MS	Matrix Spike	Total/NA	Solid	8015B NM	62104
880-32940-A-27-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62104

Prep Batch: 62104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	8015NM Prep	
890-5213-2	BG23-01 1'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

GC Semi VOA (Continued)

Prep Batch: 62104 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-3	BG23-01 2'	Total/NA	Solid	8015NM Prep	
890-5213-4	BG23-01 3'	Total/NA	Solid	8015NM Prep	
890-5213-5	BG23-01 4'	Total/NA	Solid	8015NM Prep	
MB 880-62104/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62104/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62104/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-32940-A-27-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-32940-A-27-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Total/NA	Solid	8015 NM	
890-5213-2	BG23-01 1'	Total/NA	Solid	8015 NM	
890-5213-3	BG23-01 2'	Total/NA	Solid	8015 NM	
890-5213-4	BG23-01 3'	Total/NA	Solid	8015 NM	
890-5213-5	BG23-01 4'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 62154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Soluble	Solid	DI Leach	
890-5213-2	BG23-01 1'	Soluble	Solid	DI Leach	
890-5213-3	BG23-01 2'	Soluble	Solid	DI Leach	
890-5213-4	BG23-01 3'	Soluble	Solid	DI Leach	
890-5213-5	BG23-01 4'	Soluble	Solid	DI Leach	
MB 880-62154/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62154/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62154/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33015-A-10-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33015-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5213-1	BG23-01 0'	Soluble	Solid	300.0	62154
890-5213-2	BG23-01 1'	Soluble	Solid	300.0	62154
890-5213-3	BG23-01 2'	Soluble	Solid	300.0	62154
890-5213-4	BG23-01 3'	Soluble	Solid	300.0	62154
890-5213-5	BG23-01 4'	Soluble	Solid	300.0	62154
MB 880-62154/1-A	Method Blank	Soluble	Solid	300.0	62154
LCS 880-62154/2-A	Lab Control Sample	Soluble	Solid	300.0	62154
LCSD 880-62154/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62154
880-33015-A-10-D MS	Matrix Spike	Soluble	Solid	300.0	62154
880-33015-A-10-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62154

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 0'

Lab Sample ID: 890-5213-1
Matrix: Solid
Date Collected: 09/06/23 14:09
Date Received: 09/07/23 10:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	62070	09/08/23 10:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62115	09/09/23 23:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62188	09/11/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			62143	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 01:06	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		1			62337	09/13/23 07:45	CH	EET MID

Client Sample ID: BG23-01 1'

Lab Sample ID: 890-5213-2
Matrix: Solid
Date Collected: 09/06/23 14:25
Date Received: 09/07/23 10:16

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	62070	09/08/23 10:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62115	09/09/23 23:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62188	09/11/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			62143	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 01:28	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		1			62337	09/13/23 07:52	CH	EET MID

Client Sample ID: BG23-01 2'

Lab Sample ID: 890-5213-3
Matrix: Solid
Date Collected: 09/06/23 14:32
Date Received: 09/07/23 10:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62070	09/08/23 10:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62115	09/09/23 23:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62188	09/11/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			62143	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 01:50	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		5			62337	09/13/23 07:58	CH	EET MID

Client Sample ID: BG23-01 3'

Lab Sample ID: 890-5213-4
Matrix: Solid
Date Collected: 09/06/23 14:38
Date Received: 09/07/23 10:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62070	09/08/23 10:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62115	09/10/23 00:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62188	09/11/23 13:07	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Client Sample ID: BG23-01 3'

Lab Sample ID: 890-5213-4
Matrix: Solid
Date Collected: 09/06/23 14:38
Date Received: 09/07/23 10:16

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			62143	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 02:35	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		5			62337	09/13/23 08:05	CH	EET MID

Client Sample ID: BG23-01 4'

Lab Sample ID: 890-5213-5
Matrix: Solid
Date Collected: 09/06/23 14:45
Date Received: 09/07/23 10:16

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	62070	09/08/23 10:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62115	09/10/23 00:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62188	09/11/23 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			62143	09/11/23 09:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	62104	09/08/23 15:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62025	09/09/23 02:58	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62154	09/11/23 10:21	AG	EET MID
Soluble	Analysis	300.0		5			62337	09/13/23 08:12	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycle 2

Job ID: 890-5213-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5213-1	BG23-01 0'	Solid	09/06/23 14:09	09/07/23 10:16	0
890-5213-2	BG23-01 1'	Solid	09/06/23 14:25	09/07/23 10:16	1
890-5213-3	BG23-01 2'	Solid	09/06/23 14:32	09/07/23 10:16	2
890-5213-4	BG23-01 3'	Solid	09/06/23 14:38	09/07/23 10:16	3
890-5213-5	BG23-01 4'	Solid	09/06/23 14:45	09/07/23 10:16	4

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page _____ of _____

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	On File	Address:	On File
City, State ZIP:		City, State ZIP:	
Phone:		Email:	cdixon@vertex.ca

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:	Mobley Water Recycle	Turn Around	☐ Routine ☐ Rush
Project Number:	23E-04909		
Project Location:	Mobley	Due Date:	9/15/23
Sampler's Name:	Deusavan CostaFilho	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:	TNM 007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

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

890-5213 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015D	Cl	Sample Comments
BG23-01 0'	Soil	9.6.23	14:09	0'	Grab	1		✓	✓	✓	
BG23-01 1'			14:25	1'							
BG23-01 2'			14:32	2'							
BG23-01 3'			14:38	3'							
BG23-01 4'			14:45	4'							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10:16 9-1-23			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Please CC Deusavan CostaFilho at DCostaFilho@vertex.ca

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No.: 890-1489 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-5213-1
Address: 1211 W Florida Ave,	Due Date Requested: 9/13/2023			
City: Midland	TAT Requested (days)			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #			
Email	WO #			
Project Name: mobley water recycle	Project #: 89000162			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX - LL	Total_BTEX_GCV	8015MOD_Calc	Total Number of containers	Special Instructions/Note
Preservation Code:													
BG23-01 0' (890-5213-1)	9/6/23	14 09 Mountain		Solid			X	X	X	X	X	1	
BG23-01 1' (890-5213-2)	9/6/23	14 25 Mountain		Solid			X	X	X	X	X	1	
BG23-01 2' (890-5213-3)	9/6/23	14 32 Mountain		Solid			X	X	X	X	X	1	
BG23-01 3' (890-5213-4)	9/6/23	14 38 Mountain		Solid			X	X	X	X	X	1	
BG23-01 4' (890-5213-5)	9/6/23	14 45 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Date/Time	Company		Date/Time	Company
Relinquished by			Received by		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 5.4/5.1

Ver: 06/08/2021

Page 139 of 572
Received by OCD: 7/31/2024 4:04:52 PM
9/13/2023
Page 23 of 25
Released to Imaging: 3/12/2025 9:46:11 AM

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5213-1
SDG Number: 23E-04909

Login Number: 5213
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5213-1
SDG Number: 23E-04909

Login Number: 5213
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 09/08/23 10:49 AM

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.	True	
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 9/18/2023 10:28:42 AM

JOB DESCRIPTION

MOBLEY WATER RECYCLING 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5231-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 9/12/2023 9:46:11 AM

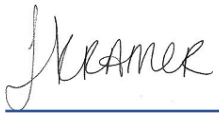
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/18/2023 10:28:42 AM

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

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Laboratory Job ID: 890-5231-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 16
Lab Chronicle 19
Certification Summary 21
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 25

Definitions/Glossary

Client: Vertex Job ID: 890-5231-1
Project/Site: MOBLEY WATER RECYCLING 2 SDG: 23E-04909

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Job ID: 890-5231-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5231-1

Receipt
The samples were received on 9/11/2023 9:12 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BG23-03 0' (890-5231-1), BG23-03 1' (890-5231-2), BG23-03 2' (890-5231-3), BG23-03 3' (890-5231-4) and BG23-03 4' (890-5231-5).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-62237 recovered under the lower control limit for Toluene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62273 and analytical batch 880-62237 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BG23-03 0' (890-5231-1) and BG23-03 1' (890-5231-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: (890-5230-A-1-A), (890-5230-A-1-B MS) and (890-5230-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BG23-03 0' (890-5231-1) and BG23-03 4' (890-5231-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62304/20), (CCV 880-62304/31) and (CCV 880-62304/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-62270 and analytical batch 880-62304 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

Released to Imaging: 3/12/2025 9:46:11 AM

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 0'

Lab Sample ID: 890-5231-1
Matrix: Solid
Date Collected: 09/07/23 11:45
Date Received: 09/11/23 09:12
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F2 F1	0.00200		mg/Kg		09/12/23 11:46	09/13/23 07:01	1
Ethylbenzene	<0.00200	U F2	0.00200		mg/Kg		09/12/23 11:46	09/13/23 07:01	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		09/12/23 11:46	09/13/23 07:01	1
Xylenes, Total	<0.00401	U F2 F1	0.00401		mg/Kg		09/12/23 11:46	09/13/23 07:01	1
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.00401		mg/Kg		09/12/23 11:46	09/13/23 07:01	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		09/12/23 11:46	09/13/23 07:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/12/23 11:46*	*09/13/23 07:01*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*09/12/23 11:46*	*09/13/23 07:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 17:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 17:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 17:44*	*1*
o-Terphenyl	*119*		*70 - 130*	*09/12/23 11:33*	*09/13/23 17:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3660**		50.4		mg/Kg			09/15/23 15:46	10

Client Sample ID: BG23-03 1'

Lab Sample ID: 890-5231-2
Matrix: Solid
Date Collected: 09/07/23 11:54
Date Received: 09/11/23 09:12
Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 07:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 07:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*267*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 07:22*	*1*
1,4-Difluorobenzene (Surr)	*235*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 07:22*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 1'

Lab Sample ID: 890-5231-2
Matrix: Solid
Date Collected: 09/07/23 11:54
Date Received: 09/11/23 09:12
Sample Depth: 1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 18:06	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 18:06	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:06*	*1*
o-Terphenyl	*106*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**523**		5.04		mg/Kg			09/15/23 15:52	1

Client Sample ID: BG23-03 2'

Lab Sample ID: 890-5231-3
Matrix: Solid
Date Collected: 09/07/23 12:01
Date Received: 09/11/23 09:12
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 07:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 07:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/12/23 11:46*	*09/13/23 07:42*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/12/23 11:46*	*09/13/23 07:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 18:28	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 18:28	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:28*	*1*
o-Terphenyl	*108*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:28*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 2'

Lab Sample ID: 890-5231-3
Matrix: Solid
Date Collected: 09/07/23 12:01
Date Received: 09/11/23 09:12
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	549		5.00		mg/Kg			09/15/23 15:59	1

Client Sample ID: BG23-03 3'

Lab Sample ID: 890-5231-4
Matrix: Solid
Date Collected: 09/07/23 12:08
Date Received: 09/11/23 09:12
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 11:46	09/13/23 08:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 11:46	09/13/23 08:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/12/23 11:46*	*09/13/23 08:03*	*1*
1,4-Difluorobenzene (Surr)	*130*		*70 - 130*	*09/12/23 11:46*	*09/13/23 08:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 18:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 18:51	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:51*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/12/23 11:33*	*09/13/23 18:51*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	257		4.99		mg/Kg			09/15/23 16:06	1

Client Sample ID: BG23-03 4'

Lab Sample ID: 890-5231-5
Matrix: Solid
Date Collected: 09/07/23 12:12
Date Received: 09/11/23 09:12
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:23	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/12/23 11:46	09/13/23 08:23	1

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 4'

Date Collected: 09/07/23 12:12
Date Received: 09/11/23 09:12
Sample Depth: 4

Lab Sample ID: 890-5231-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/12/23 11:46	09/13/23 08:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/12/23 11:46*	*09/13/23 08:23*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/12/23 11:46*	*09/13/23 08:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 19:13	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 19:13	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*146*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 19:13*	*1*
o-Terphenyl	*126*		*70 - 130*	*09/12/23 11:33*	*09/13/23 19:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**508**		50.5		mg/Kg			09/14/23 19:49	10

Surrogate Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-5231-1	BG23-03 0'	69 S1-	89
890-5231-1 MS	BG23-03 0'	242 S1+	227 S1+
890-5231-1 MSD	BG23-03 0'	302 S1+	279 S1+
890-5231-2	BG23-03 1'	267 S1+	235 S1+
890-5231-3	BG23-03 2'	83	96
890-5231-4	BG23-03 3'	117	130
890-5231-5	BG23-03 4'	88	97
LCS 880-62273/1-A	Lab Control Sample	94	98
LCSD 880-62273/2-A	Lab Control Sample Dup	85	90
MB 880-62273/5-A	Method Blank	103	132 S1+
MB 880-62281/5-A	Method Blank	108	121

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5230-A-1-B MS	Matrix Spike	133 S1+	102
890-5230-A-1-C MSD	Matrix Spike Duplicate	149 S1+	116
890-5231-1	BG23-03 0'	140 S1+	119
890-5231-2	BG23-03 1'	128	106
890-5231-3	BG23-03 2'	129	108
890-5231-4	BG23-03 3'	125	104
890-5231-5	BG23-03 4'	146 S1+	126
LCS 880-62270/2-A	Lab Control Sample	108	105
LCSD 880-62270/3-A	Lab Control Sample Dup	107	99
MB 880-62270/1-A	Method Blank	130	111

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62273/5-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/12/23 11:46*	*09/13/23 06:33*	*1*
1,4-Difluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 06:33*	*1*

Lab Sample ID: LCS 880-62273/1-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62273

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09939		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09354		mg/Kg		94	70 - 130		
Toluene			0.100	0.09793		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1981		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09451		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-62273/2-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62273

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09184		mg/Kg		92	70 - 130	8	35
Ethylbenzene			0.100	0.07866		mg/Kg		79	70 - 130	17	35
Toluene			0.100	0.09043		mg/Kg		90	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1760		mg/Kg		88	70 - 130	12	35
o-Xylene			0.100	0.08506		mg/Kg		85	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-5231-1 MS
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: BG23-03 0'
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U F2 F1	0.0998	0.1162		mg/Kg		116	70 - 130		
Ethylbenzene	<0.00200	U F2	0.0998	0.07390		mg/Kg		74	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

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

Lab Sample ID: 890-5231-1 MS
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: BG23-03 0'
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00200	U F1	0.0998	0.04723	F1	mg/Kg		46	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.200	0.2476		mg/Kg		124	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.1312	F1	mg/Kg		131	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*242*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*227*	*S1+*	*70 - 130*

Lab Sample ID: 890-5231-1 MSD
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: BG23-03 0'
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0990	0.1986	F1 F2	mg/Kg		201	70 - 130	52	35
Ethylbenzene	<0.00200	U F2	0.0990	0.1141	F2	mg/Kg		115	70 - 130	43	35
Toluene	<0.00200	U F1	0.0990	0.04674	F1	mg/Kg		46	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.198	0.4186	F1 F2	mg/Kg		211	70 - 130	51	35
o-Xylene	<0.00200	U F2 F1	0.0990	0.2155	F1 F2	mg/Kg		218	70 - 130	49	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*302*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*279*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-62281/5-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/12/23 14:24*	*09/12/23 18:58*	*1*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*09/12/23 14:24*	*09/12/23 18:58*	*1*

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

Lab Sample ID: MB 880-62270/1-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62270/1-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*09/12/23 11:33*	*09/13/23 08:10*	*1*
o-Terphenyl	*111*		*70 - 130*	*09/12/23 11:33*	*09/13/23 08:10*	*1*

Lab Sample ID: LCS 880-62270/2-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62270

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1056		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	986.8		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-62270/3-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62270

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1081		mg/Kg		108	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	980.9		mg/Kg		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 890-5230-A-1-B MS
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	950.2		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1243		mg/Kg		121	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*102*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

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

Lab Sample ID: 890-5230-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62304 — **Prep Batch: 62270**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1027		mg/Kg		100	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1392	F1	mg/Kg		135	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*149*	*S1+*	*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62348/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/14/23 17:03	1

Lab Sample ID: LCS 880-62348/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	239.7		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-62348/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62516

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.8		mg/Kg		99	90 - 110	3	20

Lab Sample ID: 880-33048-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7990		2520	10510		mg/Kg		100	90 - 110

Lab Sample ID: 880-33048-A-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7990		2520	10550		mg/Kg		101	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-62366/1-A
Matrix: Solid
Analysis Batch: 62582

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		mg/Kg			09/15/23 09:02	1

Lab Sample ID: LCS 880-62366/2-A
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-62366/3-A
Matrix: Solid
Analysis Batch: 62582

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	246.0		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-33048-A-2-C MS
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	6630		2520	9205		mg/Kg		102	90 - 110		

Lab Sample ID: 880-33048-A-2-D MSD
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	6630		2520	9145		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 890-5230-A-7-D MS
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	166		250	399.0		mg/Kg		93	90 - 110		

Lab Sample ID: 890-5230-A-7-E MSD
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	166		250	400.0		mg/Kg		94	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

GC VOA

Analysis Batch: 62237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Total/NA	Solid	8021B	62273
890-5231-2	BG23-03 1'	Total/NA	Solid	8021B	62273
890-5231-3	BG23-03 2'	Total/NA	Solid	8021B	62273
890-5231-4	BG23-03 3'	Total/NA	Solid	8021B	62273
890-5231-5	BG23-03 4'	Total/NA	Solid	8021B	62273
MB 880-62273/5-A	Method Blank	Total/NA	Solid	8021B	62273
MB 880-62281/5-A	Method Blank	Total/NA	Solid	8021B	62281
LCS 880-62273/1-A	Lab Control Sample	Total/NA	Solid	8021B	62273
LCSD 880-62273/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62273
890-5231-1 MS	BG23-03 0'	Total/NA	Solid	8021B	62273
890-5231-1 MSD	BG23-03 0'	Total/NA	Solid	8021B	62273

Prep Batch: 62273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Total/NA	Solid	5035	
890-5231-2	BG23-03 1'	Total/NA	Solid	5035	
890-5231-3	BG23-03 2'	Total/NA	Solid	5035	
890-5231-4	BG23-03 3'	Total/NA	Solid	5035	
890-5231-5	BG23-03 4'	Total/NA	Solid	5035	
MB 880-62273/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62273/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62273/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5231-1 MS	BG23-03 0'	Total/NA	Solid	5035	
890-5231-1 MSD	BG23-03 0'	Total/NA	Solid	5035	

Prep Batch: 62281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62281/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 62346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Total/NA	Solid	Total BTEX	
890-5231-2	BG23-03 1'	Total/NA	Solid	Total BTEX	
890-5231-3	BG23-03 2'	Total/NA	Solid	Total BTEX	
890-5231-4	BG23-03 3'	Total/NA	Solid	Total BTEX	
890-5231-5	BG23-03 4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 62270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Total/NA	Solid	8015NM Prep	
890-5231-2	BG23-03 1'	Total/NA	Solid	8015NM Prep	
890-5231-3	BG23-03 2'	Total/NA	Solid	8015NM Prep	
890-5231-4	BG23-03 3'	Total/NA	Solid	8015NM Prep	
890-5231-5	BG23-03 4'	Total/NA	Solid	8015NM Prep	
MB 880-62270/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62270/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5230-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5230-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

GC Semi VOA

Analysis Batch: 62304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Total/NA	Solid	8015B NM	62270
890-5231-2	BG23-03 1'	Total/NA	Solid	8015B NM	62270
890-5231-3	BG23-03 2'	Total/NA	Solid	8015B NM	62270
890-5231-4	BG23-03 3'	Total/NA	Solid	8015B NM	62270
890-5231-5	BG23-03 4'	Total/NA	Solid	8015B NM	62270
MB 880-62270/1-A	Method Blank	Total/NA	Solid	8015B NM	62270
LCS 880-62270/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62270
LCSD 880-62270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62270
890-5230-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	62270
890-5230-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62270

HPLC/IC

Leach Batch: 62348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-5	BG23-03 4'	Soluble	Solid	DI Leach	
MB 880-62348/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62348/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62348/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33048-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33048-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 62366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Soluble	Solid	DI Leach	
890-5231-2	BG23-03 1'	Soluble	Solid	DI Leach	
890-5231-3	BG23-03 2'	Soluble	Solid	DI Leach	
890-5231-4	BG23-03 3'	Soluble	Solid	DI Leach	
MB 880-62366/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62366/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62366/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33048-A-2-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33048-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-5230-A-7-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5230-A-7-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-5	BG23-03 4'	Soluble	Solid	300.0	62348
MB 880-62348/1-A	Method Blank	Soluble	Solid	300.0	62348
LCS 880-62348/2-A	Lab Control Sample	Soluble	Solid	300.0	62348
LCSD 880-62348/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62348
880-33048-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	62348
880-33048-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62348

Analysis Batch: 62582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5231-1	BG23-03 0'	Soluble	Solid	300.0	62366
890-5231-2	BG23-03 1'	Soluble	Solid	300.0	62366
890-5231-3	BG23-03 2'	Soluble	Solid	300.0	62366
890-5231-4	BG23-03 3'	Soluble	Solid	300.0	62366

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

HPLC/IC (Continued)

Analysis Batch: 62582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62366/1-A	Method Blank	Soluble	Solid	300.0	62366
LCS 880-62366/2-A	Lab Control Sample	Soluble	Solid	300.0	62366
LCSD 880-62366/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62366
880-33048-A-2-C MS	Matrix Spike	Soluble	Solid	300.0	62366
880-33048-A-2-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62366
890-5230-A-7-D MS	Matrix Spike	Soluble	Solid	300.0	62366
890-5230-A-7-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62366

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 0'

Lab Sample ID: 890-5231-1
Matrix: Solid
Date Collected: 09/07/23 11:45
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 07:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62346	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 17:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		10			62582	09/15/23 15:46	CH	EET MID

Client Sample ID: BG23-03 1'

Lab Sample ID: 890-5231-2
Matrix: Solid
Date Collected: 09/07/23 11:54
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 07:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62346	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 18:06	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 15:52	CH	EET MID

Client Sample ID: BG23-03 2'

Lab Sample ID: 890-5231-3
Matrix: Solid
Date Collected: 09/07/23 12:01
Date Received: 09/11/23 09:12

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	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 07:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62346	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 18:28	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 15:59	CH	EET MID

Client Sample ID: BG23-03 3'

Lab Sample ID: 890-5231-4
Matrix: Solid
Date Collected: 09/07/23 12:08
Date Received: 09/11/23 09:12

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	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 08:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62346	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 18:51	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Client Sample ID: BG23-03 3'

Lab Sample ID: 890-5231-4
Matrix: Solid
Date Collected: 09/07/23 12:08
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 16:06	CH	EET MID

Client Sample ID: BG23-03 4'

Lab Sample ID: 890-5231-5
Matrix: Solid
Date Collected: 09/07/23 12:12
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 08:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62346	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 19:13	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		10			62516	09/14/23 19:49	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5231-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5231-1	BG23-03 0'	Solid	09/07/23 11:45	09/11/23 09:12	0
890-5231-2	BG23-03 1'	Solid	09/07/23 11:54	09/11/23 09:12	1
890-5231-3	BG23-03 2'	Solid	09/07/23 12:01	09/11/23 09:12	2
890-5231-4	BG23-03 3'	Solid	09/07/23 12:08	09/11/23 09:12	3
890-5231-5	BG23-03 4'	Solid	09/07/23 12:12	09/11/23 09:12	4

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Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page 1 of 1

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☑ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	9.18.23
Sampler's Name:	Ifeuseran Costafilho	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:	TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

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	TPH 8015D	Cl	Sample Comments
BG23-03	0'	Soil	9.7.23	11:45	0'	grab	1		✓	✓	✓	
BG23-03	1'	↓	↓	11:54	1'	↓	↓		↓	↓	↓	
B23-03	2'			12:01	2'							
B23-03	3'			12:08	3'							
B23-03	4'			12:12	4'							

890-5231 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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9-11-23 9:12	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc Ifeuseran Costafilho at Dcostafilho@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5231-1
SDG Number: 23E-04909

Login Number: 5231
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5231-1
SDG Number: 23E-04909

Login Number: 5231
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/12/23 12:02 PM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

MOBLEY WATER RECYCLING 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5232-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 9/12/2023 9:46:11 AM

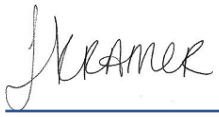
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/15/2023 12:29:05 PM

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

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Laboratory Job ID: 890-5232-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 16
Lab Chronicle 18
Certification Summary 20
Method Summary 21
Sample Summary 22
Chain of Custody 23
Receipt Checklists 24

Definitions/Glossary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Job ID: 890-5232-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5232-1

Receipt
The samples were received on 9/11/2023 9:12 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BG23-02 0' (890-5232-1), BG23-02 1' (890-5232-2), BG23-02 2' (890-5232-3), BG23-02 3' (890-5232-4) and BG23-02 4' (890-5232-5).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-62237 recovered under the lower control limit for Toluene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62273 and analytical batch 880-62237 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BG23-02 0' (890-5232-1), BG23-02 2' (890-5232-3) and (890-5231-A-1-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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 880-62290 and analytical batch 880-62306 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BG23-02 1' (890-5232-2), BG23-02 2' (890-5232-3), BG23-02 3' (890-5232-4) and BG23-02 4' (890-5232-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-62290 and analytical batch 880-62306 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 0'

Lab Sample ID: 890-5232-1
Matrix: Solid
Date Collected: 09/07/23 10:28
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/12/23 11:46	09/13/23 08:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/12/23 11:46	09/13/23 08:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 08:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*228*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 08:44*	*1*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*09/12/23 11:46*	*09/13/23 08:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1	50.3		mg/Kg		09/12/23 16:24	09/13/23 11:07	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/12/23 16:24	09/13/23 11:07	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/12/23 16:24	09/13/23 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*09/12/23 16:24*	*09/13/23 11:07*	*1*
o-Terphenyl	*126*		*70 - 130*	*09/12/23 16:24*	*09/13/23 11:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**392**		49.9		mg/Kg			09/14/23 19:56	10

Client Sample ID: BG23-02 1'

Lab Sample ID: 890-5232-2
Matrix: Solid
Date Collected: 09/07/23 10:32
Date Received: 09/11/23 09:12
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 09:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 09:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/12/23 11:46*	*09/13/23 09:04*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/12/23 11:46*	*09/13/23 09:04*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 1'

Lab Sample ID: 890-5232-2
Matrix: Solid
Date Collected: 09/07/23 10:32
Date Received: 09/11/23 09:12
Sample Depth: 1'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1	50.3		mg/Kg		09/12/23 16:24	09/13/23 12:12	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/12/23 16:24	09/13/23 12:12	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/12/23 16:24	09/13/23 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:12*	*1*
o-Terphenyl	*147*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**974**		49.7		mg/Kg			09/14/23 20:02	10

Client Sample ID: BG23-02 2'

Lab Sample ID: 890-5232-3
Matrix: Solid
Date Collected: 09/07/23 10:37
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/12/23 11:46	09/13/23 09:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/12/23 11:46	09/13/23 09:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/12/23 11:46	09/13/23 09:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/12/23 11:46	09/13/23 09:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/12/23 11:46	09/13/23 09:25	1
o-Xylene	**0.00248**		0.00198		mg/Kg		09/12/23 11:46	09/13/23 09:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*195*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 09:25*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/12/23 11:46*	*09/13/23 09:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1	50.1		mg/Kg		09/12/23 16:24	09/13/23 12:34	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/12/23 16:24	09/13/23 12:34	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/12/23 16:24	09/13/23 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:34*	*1*
o-Terphenyl	*154*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:34*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 2'

Lab Sample ID: 890-5232-3
Matrix: Solid
Date Collected: 09/07/23 10:37
Date Received: 09/11/23 09:12
Sample Depth: 2'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	361		24.8		mg/Kg			09/14/23 20:09	5

Client Sample ID: BG23-02 3'

Lab Sample ID: 890-5232-4
Matrix: Solid
Date Collected: 09/07/23 10:42
Date Received: 09/11/23 09:12
Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 09:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 11:46	09/13/23 09:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 11:46	09/13/23 09:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/12/23 11:46*	*09/13/23 09:45*	*1*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*09/12/23 11:46*	*09/13/23 09:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U *1	50.5		mg/Kg		09/12/23 16:24	09/13/23 12:57	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/12/23 16:24	09/13/23 12:57	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/12/23 16:24	09/13/23 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:57*	*1*
o-Terphenyl	*153*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 12:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	231		25.1		mg/Kg			09/14/23 20:16	5

Client Sample ID: BG23-02 4'

Lab Sample ID: 890-5232-5
Matrix: Solid
Date Collected: 09/07/23 10:53
Date Received: 09/11/23 09:12
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 10:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 10:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 10:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 11:46	09/13/23 10:06	1

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 4'

Date Collected: 09/07/23 10:53
Date Received: 09/11/23 09:12
Sample Depth: 4'

Lab Sample ID: 890-5232-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 11:46	09/13/23 10:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 10:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*09/12/23 11:46*	*09/13/23 10:06*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/12/23 11:46*	*09/13/23 10:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 11:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		09/12/23 16:24	09/13/23 13:19	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/12/23 16:24	09/13/23 13:19	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/12/23 16:24	09/13/23 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 13:19*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 13:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**586**		49.8		mg/Kg			09/14/23 20:22	10

Surrogate Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

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)
890-5231-A-1-A MS	Matrix Spike	242 S1+	227 S1+
890-5231-A-1-B MSD	Matrix Spike Duplicate	302 S1+	279 S1+
890-5232-1	BG23-02 0'	228 S1+	126
890-5232-2	BG23-02 1'	94	104
890-5232-3	BG23-02 2'	195 S1+	96
890-5232-4	BG23-02 3'	100	126
890-5232-5	BG23-02 4'	85	93
LCS 880-62273/1-A	Lab Control Sample	94	98
LCSD 880-62273/2-A	Lab Control Sample Dup	85	90
MB 880-62273/5-A	Method Blank	103	132 S1+
MB 880-62281/5-A	Method Blank	108	121

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)
890-5232-1	BG23-02 0'	122	126
890-5232-1 MS	BG23-02 0'	115	109
890-5232-1 MSD	BG23-02 0'	120	114
890-5232-2	BG23-02 1'	142 S1+	147 S1+
890-5232-3	BG23-02 2'	145 S1+	154 S1+
890-5232-4	BG23-02 3'	143 S1+	153 S1+
890-5232-5	BG23-02 4'	137 S1+	142 S1+
LCS 880-62290/2-A	Lab Control Sample	99	111
LCSD 880-62290/3-A	Lab Control Sample Dup	98	108
MB 880-62290/1-A	Method Blank	132 S1+	142 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62273/5-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62273

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 11:46	09/13/23 06:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:46	09/13/23 06:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/12/23 11:46*	*09/13/23 06:33*	*1*
1,4-Difluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/12/23 11:46*	*09/13/23 06:33*	*1*

Lab Sample ID: LCS 880-62273/1-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62273

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09939		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09354		mg/Kg		94	70 - 130		
Toluene			0.100	0.09793		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1981		mg/Kg		99	70 - 130		
o-Xylene			0.100	0.09451		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-62273/2-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62273

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09184		mg/Kg		92	70 - 130	8	35
Ethylbenzene			0.100	0.07866		mg/Kg		79	70 - 130	17	35
Toluene			0.100	0.09043		mg/Kg		90	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1760		mg/Kg		88	70 - 130	12	35
o-Xylene			0.100	0.08506		mg/Kg		85	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-5231-A-1-A MS
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U F2 F1	0.0998	0.1162		mg/Kg		116	70 - 130		
Ethylbenzene	<0.00200	U F2	0.0998	0.07390		mg/Kg		74	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

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

Lab Sample ID: 890-5231-A-1-A MS
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00200	U F1	0.0998	0.04723	F1	mg/Kg		46	70 - 130
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.200	0.2476		mg/Kg		124	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.1312	F1	mg/Kg		131	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*242*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*227*	*S1+*	*70 - 130*

Lab Sample ID: 890-5231-A-1-B MSD
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F2 F1	0.0990	0.1986	F1 F2	mg/Kg		201	70 - 130	52	35
Ethylbenzene	<0.00200	U F2	0.0990	0.1141	F2	mg/Kg		115	70 - 130	43	35
Toluene	<0.00200	U F1	0.0990	0.04674	F1	mg/Kg		46	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.198	0.4186	F1 F2	mg/Kg		211	70 - 130	51	35
o-Xylene	<0.00200	U F2 F1	0.0990	0.2155	F1 F2	mg/Kg		218	70 - 130	49	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*302*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*279*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-62281/5-A
Matrix: Solid
Analysis Batch: 62237

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62281

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 14:24	09/12/23 18:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 14:24	09/12/23 18:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*09/12/23 14:24*	*09/12/23 18:58*	*1*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*09/12/23 14:24*	*09/12/23 18:58*	*1*

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

Lab Sample ID: MB 880-62290/1-A
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/12/23 16:24	09/13/23 08:10	1

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62290/1-A
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/23 16:24	09/13/23 08:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/23 16:24	09/13/23 08:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 08:10*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*09/12/23 16:24*	*09/13/23 08:10*	*1*

Lab Sample ID: LCS 880-62290/2-A
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1115		mg/Kg		112	70 - 130
Diesel Range Organics (Over C10-C28)	1000	982.7		mg/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: LCSD 880-62290/3-A
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62290

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	848.2	*1	mg/Kg		85	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	1000	975.1		mg/Kg		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 890-5232-1 MS
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: BG23-02 0'
Prep Type: Total/NA
Prep Batch: 62290

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1	993	803.1		mg/Kg		76	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	993	874.9		mg/Kg		83	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

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

Lab Sample ID: 890-5232-1 MSD
Matrix: Solid
Analysis Batch: 62306

Client Sample ID: BG23-02 0'
Prep Type: Total/NA
Prep Batch: 62290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1	993	799.3		mg/Kg		76	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.3	U	993	933.3		mg/Kg		89	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62348/1-A
Matrix: Solid
Analysis Batch: 62516

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		mg/Kg			09/14/23 17:03	1

Lab Sample ID: LCS 880-62348/2-A
Matrix: Solid
Analysis Batch: 62516

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	239.7		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-62348/3-A
Matrix: Solid
Analysis Batch: 62516

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	247.8		mg/Kg		99	90 - 110	3	20

Lab Sample ID: 880-33048-A-1-C MS
Matrix: Solid
Analysis Batch: 62516

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7990		2520	10510		mg/Kg		100	90 - 110

Lab Sample ID: 880-33048-A-1-D MSD
Matrix: Solid
Analysis Batch: 62516

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7990		2520	10550		mg/Kg		101	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-33132-A-7-C MS
Matrix: Solid
Analysis Batch: 62516

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1670		1250	2972		mg/Kg		105	90 - 110		

Lab Sample ID: 880-33132-A-7-D MSD
Matrix: Solid
Analysis Batch: 62516

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1670		1250	2950		mg/Kg		103	90 - 110	1	20

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

GC VOA

Analysis Batch: 62237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Total/NA	Solid	8021B	62273
890-5232-2	BG23-02 1'	Total/NA	Solid	8021B	62273
890-5232-3	BG23-02 2'	Total/NA	Solid	8021B	62273
890-5232-4	BG23-02 3'	Total/NA	Solid	8021B	62273
890-5232-5	BG23-02 4'	Total/NA	Solid	8021B	62273
MB 880-62273/5-A	Method Blank	Total/NA	Solid	8021B	62273
MB 880-62281/5-A	Method Blank	Total/NA	Solid	8021B	62281
LCS 880-62273/1-A	Lab Control Sample	Total/NA	Solid	8021B	62273
LCSD 880-62273/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62273
890-5231-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	62273
890-5231-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62273

Prep Batch: 62273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Total/NA	Solid	5035	
890-5232-2	BG23-02 1'	Total/NA	Solid	5035	
890-5232-3	BG23-02 2'	Total/NA	Solid	5035	
890-5232-4	BG23-02 3'	Total/NA	Solid	5035	
890-5232-5	BG23-02 4'	Total/NA	Solid	5035	
MB 880-62273/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62273/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62273/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5231-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-5231-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 62281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62281/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 62347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Total/NA	Solid	Total BTEX	
890-5232-2	BG23-02 1'	Total/NA	Solid	Total BTEX	
890-5232-3	BG23-02 2'	Total/NA	Solid	Total BTEX	
890-5232-4	BG23-02 3'	Total/NA	Solid	Total BTEX	
890-5232-5	BG23-02 4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 62290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Total/NA	Solid	8015NM Prep	
890-5232-2	BG23-02 1'	Total/NA	Solid	8015NM Prep	
890-5232-3	BG23-02 2'	Total/NA	Solid	8015NM Prep	
890-5232-4	BG23-02 3'	Total/NA	Solid	8015NM Prep	
890-5232-5	BG23-02 4'	Total/NA	Solid	8015NM Prep	
MB 880-62290/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62290/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62290/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5232-1 MS	BG23-02 0'	Total/NA	Solid	8015NM Prep	
890-5232-1 MSD	BG23-02 0'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

GC Semi VOA

Analysis Batch: 62306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Total/NA	Solid	8015B NM	62290
890-5232-2	BG23-02 1'	Total/NA	Solid	8015B NM	62290
890-5232-3	BG23-02 2'	Total/NA	Solid	8015B NM	62290
890-5232-4	BG23-02 3'	Total/NA	Solid	8015B NM	62290
890-5232-5	BG23-02 4'	Total/NA	Solid	8015B NM	62290
MB 880-62290/1-A	Method Blank	Total/NA	Solid	8015B NM	62290
LCS 880-62290/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62290
LCSD 880-62290/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62290
890-5232-1 MS	BG23-02 0'	Total/NA	Solid	8015B NM	62290
890-5232-1 MSD	BG23-02 0'	Total/NA	Solid	8015B NM	62290

HPLC/IC

Leach Batch: 62348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Soluble	Solid	DI Leach	
890-5232-2	BG23-02 1'	Soluble	Solid	DI Leach	
890-5232-3	BG23-02 2'	Soluble	Solid	DI Leach	
890-5232-4	BG23-02 3'	Soluble	Solid	DI Leach	
890-5232-5	BG23-02 4'	Soluble	Solid	DI Leach	
MB 880-62348/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62348/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62348/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33048-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33048-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-33132-A-7-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33132-A-7-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5232-1	BG23-02 0'	Soluble	Solid	300.0	62348
890-5232-2	BG23-02 1'	Soluble	Solid	300.0	62348
890-5232-3	BG23-02 2'	Soluble	Solid	300.0	62348
890-5232-4	BG23-02 3'	Soluble	Solid	300.0	62348
890-5232-5	BG23-02 4'	Soluble	Solid	300.0	62348
MB 880-62348/1-A	Method Blank	Soluble	Solid	300.0	62348
LCS 880-62348/2-A	Lab Control Sample	Soluble	Solid	300.0	62348
LCSD 880-62348/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62348
880-33048-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	62348
880-33048-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62348
880-33132-A-7-C MS	Matrix Spike	Soluble	Solid	300.0	62348
880-33132-A-7-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62348

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 0'

Lab Sample ID: 890-5232-1
Matrix: Solid
Date Collected: 09/07/23 10:28
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 08:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62347	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	62290	09/12/23 16:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62306	09/13/23 11:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		10			62516	09/14/23 19:56	CH	EET MID

Client Sample ID: BG23-02 1'

Lab Sample ID: 890-5232-2
Matrix: Solid
Date Collected: 09/07/23 10:32
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 09:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62347	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62290	09/12/23 16:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62306	09/13/23 12:12	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		10			62516	09/14/23 20:02	CH	EET MID

Client Sample ID: BG23-02 2'

Lab Sample ID: 890-5232-3
Matrix: Solid
Date Collected: 09/07/23 10:37
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 09:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62347	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62290	09/12/23 16:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62306	09/13/23 12:34	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		5			62516	09/14/23 20:09	CH	EET MID

Client Sample ID: BG23-02 3'

Lab Sample ID: 890-5232-4
Matrix: Solid
Date Collected: 09/07/23 10:42
Date Received: 09/11/23 09:12

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	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 09:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62347	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62290	09/12/23 16:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62306	09/13/23 12:57	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Client Sample ID: BG23-02 3'

Lab Sample ID: 890-5232-4
Matrix: Solid
Date Collected: 09/07/23 10:42
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		5			62516	09/14/23 20:16	CH	EET MID

Client Sample ID: BG23-02 4'

Lab Sample ID: 890-5232-5
Matrix: Solid
Date Collected: 09/07/23 10:53
Date Received: 09/11/23 09:12

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	62273	09/12/23 11:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62237	09/13/23 10:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62347	09/13/23 11:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62290	09/12/23 16:24	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62306	09/13/23 13:19	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62348	09/13/23 12:02	AG	EET MID
Soluble	Analysis	300.0		10			62516	09/14/23 20:22	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5232-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5232-1	BG23-02 0'	Solid	09/07/23 10:28	09/11/23 09:12	0'
890-5232-2	BG23-02 1'	Solid	09/07/23 10:32	09/11/23 09:12	1'
890-5232-3	BG23-02 2'	Solid	09/07/23 10:37	09/11/23 09:12	2'
890-5232-4	BG23-02 3'	Solid	09/07/23 10:42	09/11/23 09:12	3'
890-5232-5	BG23-02 4'	Solid	09/07/23 10:53	09/11/23 09:12	4'

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page 1 of 7

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	On file	Address:	On file
City, State ZIP:		City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☒ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	9.18.23
Sampler's Name:	Yesavan Costafilho	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:	TJM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

ANALYSIS REQUEST

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015D	Cl
BG23-02	0'	Soil	9.7.23	10:28	0'	grab	1		X	X	X
BG23-02	1'			10:32	1'						
BG23-02	2'			10:37	2'						
BG23-02	3'			10:42	3'						
BG23-02	4'	↓	↓	10:53	4'	↓	↓		↓	↓	↓

890-5232 Chain of Custody

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 Comments

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			9-14-23 9:12	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc Yesavan Costafilho at Dcostafilho@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5232-1
SDG Number: 23E-04909

Login Number: 5232
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5232-1
SDG Number: 23E-04909

Login Number: 5232
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/12/23 12:02 PM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 9/18/2023 10:28:47 AM

JOB DESCRIPTION

Mobley Water Recycling 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5230-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 9/12/2023 9:46:11 AM

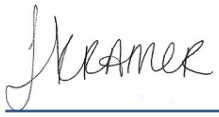
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/18/2023 10:28:47 AM

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

Client: Vertex
Project/Site: Mobley Water Recycling 2

Laboratory Job ID: 890-5230-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 16
QC Sample Results 18
QC Association Summary 24
Lab Chronicle 28
Certification Summary 32
Method Summary 33
Sample Summary 34
Chain of Custody 35
Receipt Checklists 36

Definitions/Glossary

Client: Vertex Job ID: 890-5230-1
Project/Site: Mobley Water Recycling 2 SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Job ID: 890-5230-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5230-1

Receipt
The samples were received on 9/11/2023 9:12 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-01 0' (890-5230-1), BH23-01 2' (890-5230-2), BH23-01 4' (890-5230-3), BH23-02 0' (890-5230-4), BH23-02 2' (890-5230-5), BH23-03 0' (890-5230-6), BH23-03 2' (890-5230-7), BH23-04 0' (890-5230-8), BH23-04 2' (890-5230-9), BH23-04 4' (890-5230-10), BH23-05 0' (890-5230-11) and BH23--05 2' (890-5230-12).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23-05 0' (890-5230-11) and (890-5226-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62267 and analytical batch 880-62265 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62267 and analytical batch 880-62265 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23-03 0' (890-5230-6), BH23-04 0' (890-5230-8) and BH23-04 4' (890-5230-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-5226-A-1-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH23--05 2' (890-5230-12). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: BH23-01 0' (890-5230-1), BH23-01 2' (890-5230-2), BH23-01 4' (890-5230-3), BH23-02 0' (890-5230-4), BH23-02 2' (890-5230-5), BH23-03 0' (890-5230-6), BH23-03 2' (890-5230-7), (890-5230-A-1-B MS) and (890-5230-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-04 4' (890-5230-10), BH23-05 0' (890-5230-11) and BH23--05 2' (890-5230-12). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62304/20), (CCV 880-62304/31) and (CCV 880-62304/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-62270 and analytical batch 880-62304 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Job ID: 890-5230-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-01 0'

Lab Sample ID: 890-5230-1
Matrix: Solid
Date Collected: 09/08/23 11:03
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 19:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 19:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 19:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 19:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 19:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/12/23 10:29*	*09/12/23 19:48*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/12/23 10:29*	*09/12/23 19:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 11:07	1
Diesel Range Organics (Over C10-C28)	<49.6	U F1	49.6		mg/Kg		09/12/23 11:33	09/13/23 11:07	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 11:07*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/12/23 11:33*	*09/13/23 11:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5860**		99.2		mg/Kg			09/15/23 10:51	20

Client Sample ID: BH23-01 2'

Lab Sample ID: 890-5230-2
Matrix: Solid
Date Collected: 09/08/23 11:13
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 20:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 20:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*09/12/23 10:29*	*09/12/23 20:13*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/12/23 10:29*	*09/12/23 20:13*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-01 2'

Lab Sample ID: 890-5230-2
Matrix: Solid
Date Collected: 09/08/23 11:13
Date Received: 09/11/23 09:12
Sample Depth: 2'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 12:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 12:12	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/12/23 11:33	09/13/23 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 12:12*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/12/23 11:33*	*09/13/23 12:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**874**		49.7		mg/Kg			09/15/23 14:06	10

Client Sample ID: BH23-01 4'

Lab Sample ID: 890-5230-3
Matrix: Solid
Date Collected: 09/08/23 11:52
Date Received: 09/11/23 09:12
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 20:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 20:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/12/23 10:29*	*09/12/23 20:38*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/12/23 10:29*	*09/12/23 20:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 12:34	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 12:34	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 12:34*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/12/23 11:33*	*09/13/23 12:34*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-01 4'

Lab Sample ID: 890-5230-3
Matrix: Solid
Date Collected: 09/08/23 11:52
Date Received: 09/11/23 09:12
Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2880		101		mg/Kg			09/15/23 14:12	20

Client Sample ID: BH23-02 0'

Lab Sample ID: 890-5230-4
Matrix: Solid
Date Collected: 09/08/23 12:02
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/12/23 10:29	09/12/23 21:04	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/12/23 10:29	09/12/23 21:04	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/12/23 10:29	09/12/23 21:04	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/12/23 10:29	09/12/23 21:04	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/12/23 10:29	09/12/23 21:04	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/12/23 10:29	09/12/23 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/12/23 10:29*	*09/12/23 21:04*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/12/23 10:29*	*09/12/23 21:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 12:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 12:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 12:57*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/12/23 11:33*	*09/13/23 12:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8410		100		mg/Kg			09/15/23 14:19	20

Client Sample ID: BH23-02 2'

Lab Sample ID: 890-5230-5
Matrix: Solid
Date Collected: 09/08/23 12:10
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 21:29	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-02 2'

Lab Sample ID: 890-5230-5
Matrix: Solid
Date Collected: 09/08/23 12:10
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 21:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*09/12/23 10:29*	*09/12/23 21:29*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/12/23 10:29*	*09/12/23 21:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 13:19	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 13:19	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/12/23 11:33	09/13/23 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 13:19*	*1*
o-Terphenyl	*122*		*70 - 130*	*09/12/23 11:33*	*09/13/23 13:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**338**		5.02		mg/Kg			09/15/23 14:26	1

Client Sample ID: BH23-03 0'

Lab Sample ID: 890-5230-6
Matrix: Solid
Date Collected: 09/08/23 12:15
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 21:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 21:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*09/12/23 10:29*	*09/12/23 21:54*	*1*
1,4-Difluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*09/12/23 10:29*	*09/12/23 21:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 12:56	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-03 0'

Lab Sample ID: 890-5230-6
Matrix: Solid
Date Collected: 09/08/23 12:15
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/12/23 11:33	09/13/23 13:40	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/12/23 11:33	09/13/23 13:40	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/12/23 11:33	09/13/23 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 13:40*	*1*
o-Terphenyl	*119*		*70 - 130*	*09/12/23 11:33*	*09/13/23 13:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1460**		50.1		mg/Kg			09/15/23 14:32	10

Client Sample ID: BH23-03 2'

Lab Sample ID: 890-5230-7
Matrix: Solid
Date Collected: 09/08/23 12:32
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 22:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 22:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 22:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 22:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 22:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*09/12/23 10:29*	*09/12/23 22:20*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/12/23 10:29*	*09/12/23 22:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/12/23 11:33	09/13/23 14:03	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/12/23 11:33	09/13/23 14:03	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/12/23 11:33	09/13/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 14:03*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/12/23 11:33*	*09/13/23 14:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**166**		4.99		mg/Kg			09/15/23 14:39	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-04 0'

Lab Sample ID: 890-5230-8
Matrix: Solid
Date Collected: 09/08/23 12:40
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/12/23 10:29	09/12/23 22:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/12/23 10:29	09/12/23 22:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/12/23 10:29	09/12/23 22:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/12/23 10:29	09/12/23 22:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/12/23 10:29	09/12/23 22:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/12/23 10:29	09/12/23 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*09/12/23 10:29*	*09/12/23 22:45*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*09/12/23 10:29*	*09/12/23 22:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/12/23 11:33	09/13/23 14:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/12/23 11:33	09/13/23 14:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/12/23 11:33	09/13/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/12/23 11:33*	*09/13/23 14:25*	*1*
o-Terphenyl	*112*		*70 - 130*	*09/12/23 11:33*	*09/13/23 14:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8680**		101		mg/Kg			09/15/23 14:59	20

Client Sample ID: BH23-04 2'

Lab Sample ID: 890-5230-9
Matrix: Solid
Date Collected: 09/08/23 12:47
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 23:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 23:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 23:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 23:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 10:29	09/12/23 23:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/12/23 10:29*	*09/12/23 23:11*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*09/12/23 10:29*	*09/12/23 23:11*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-04 2'

Lab Sample ID: 890-5230-9
Matrix: Solid
Date Collected: 09/08/23 12:47
Date Received: 09/11/23 09:12
Sample Depth: 2'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 14:47	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 14:47	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/12/23 11:33	09/13/23 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*09/12/23 11:33*	*09/13/23 14:47*	*1*
o-Terphenyl	*109*		*70 - 130*	*09/12/23 11:33*	*09/13/23 14:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8260**		101		mg/Kg			09/15/23 15:06	20

Client Sample ID: BH23-04 4'

Lab Sample ID: 890-5230-10
Matrix: Solid
Date Collected: 09/08/23 13:01
Date Received: 09/11/23 09:12
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 23:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 23:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 23:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 23:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/12/23 10:29	09/12/23 23:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/12/23 10:29	09/12/23 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*09/12/23 10:29*	*09/12/23 23:36*	*1*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*09/12/23 10:29*	*09/12/23 23:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/13/23 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 15:08	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 15:08	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 15:08*	*1*
o-Terphenyl	*126*		*70 - 130*	*09/12/23 11:33*	*09/13/23 15:08*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-04 4'

Lab Sample ID: 890-5230-10
Matrix: Solid
Date Collected: 09/08/23 13:01
Date Received: 09/11/23 09:12
Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1440		49.7		mg/Kg			09/15/23 15:26	10

Client Sample ID: BH23-05 0'

Lab Sample ID: 890-5230-11
Matrix: Solid
Date Collected: 09/08/23 13:13
Date Received: 09/11/23 09:12
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 05:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 05:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 05:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/12/23 11:43	09/13/23 05:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/12/23 11:43	09/13/23 05:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 05:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*09/12/23 11:43*	*09/13/23 05:48*	*1*
1,4-Difluorobenzene (Surr)	*51*	*S1-*	*70 - 130*	*09/12/23 11:43*	*09/13/23 05:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/13/23 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		09/12/23 11:33	09/13/23 15:53	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		09/12/23 11:33	09/13/23 15:53	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		09/12/23 11:33	09/13/23 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 15:53*	*1*
o-Terphenyl	*111*		*70 - 130*	*09/12/23 11:33*	*09/13/23 15:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1800		49.8		mg/Kg			09/15/23 15:32	10

Client Sample ID: BH23--05 2'

Lab Sample ID: 890-5230-12
Matrix: Solid
Date Collected: 09/08/23 13:27
Date Received: 09/11/23 09:12
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 06:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 06:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 06:08	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/12/23 11:43	09/13/23 06:08	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23--05 2'

Date Collected: 09/08/23 13:27
Date Received: 09/11/23 09:12
Sample Depth: 2'

Lab Sample ID: 890-5230-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/12/23 11:43	09/13/23 06:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/13/23 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/12/23 11:43*	*09/13/23 06:08*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*09/12/23 11:43*	*09/13/23 06:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/13/23 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 16:15	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 16:15	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/12/23 11:33	09/13/23 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*09/12/23 11:33*	*09/13/23 16:15*	*1*
o-Terphenyl	*129*		*70 - 130*	*09/12/23 11:33*	*09/13/23 16:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.02		mg/Kg			09/15/23 15:39	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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)
880-32965-A-1-A MS	Matrix Spike	87	105
880-32965-A-1-B MSD	Matrix Spike Duplicate	95	94
890-5226-A-1-B MS	Matrix Spike	132 S1+	108
890-5226-A-1-C MSD	Matrix Spike Duplicate	125	116
890-5230-1	BH23-01 0'	95	96
890-5230-2	BH23-01 2'	124	109
890-5230-3	BH23-01 4'	106	106
890-5230-4	BH23-02 0'	112	108
890-5230-5	BH23-02 2'	121	108
890-5230-6	BH23-03 0'	133 S1+	141 S1+
890-5230-7	BH23-03 2'	126	110
890-5230-8	BH23-04 0'	138 S1+	82
890-5230-9	BH23-04 2'	118	84
890-5230-10	BH23-04 4'	99	66 S1-
890-5230-11	BH23-05 0'	91	51 S1-
890-5230-12	BH23--05 2'	132 S1+	76
LCS 880-62267/1-A	Lab Control Sample	105	113
LCS 880-62272/1-A	Lab Control Sample	121	118
LCSD 880-62267/2-A	Lab Control Sample Dup	103	111
LCSD 880-62272/2-A	Lab Control Sample Dup	128	112
MB 880-62129/5-A	Method Blank	70	95
MB 880-62267/5-A	Method Blank	66 S1-	106
MB 880-62272/5-A	Method Blank	70	88

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)
890-5230-1	BH23-01 0'	137 S1+	114
890-5230-1 MS	BH23-01 0'	133 S1+	102
890-5230-1 MSD	BH23-01 0'	149 S1+	116
890-5230-2	BH23-01 2'	137 S1+	115
890-5230-3	BH23-01 4'	132 S1+	110
890-5230-4	BH23-02 0'	132 S1+	110
890-5230-5	BH23-02 2'	143 S1+	122
890-5230-6	BH23-03 0'	138 S1+	119
890-5230-7	BH23-03 2'	136 S1+	114
890-5230-8	BH23-04 0'	117	112
890-5230-9	BH23-04 2'	129	109
890-5230-10	BH23-04 4'	138 S1+	126
890-5230-11	BH23-05 0'	132 S1+	111
890-5230-12	BH23--05 2'	151 S1+	129
LCS 880-62270/2-A	Lab Control Sample	108	105
LCSD 880-62270/3-A	Lab Control Sample Dup	107	99

Surrogate Summary

Client: Vertex Job ID: 890-5230-1
Project/Site: Mobley Water Recycling 2 SDG: 23E-04909

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
MB 880-62270/1-A	Method Blank	130	111								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62129/5-A
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62129

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/23 09:25	09/12/23 11:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/23 09:25	09/12/23 11:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/23 09:25	09/12/23 11:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/11/23 09:25	09/12/23 11:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/11/23 09:25	09/12/23 11:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/23 09:25	09/12/23 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*09/11/23 09:25*	*09/12/23 11:40*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*09/11/23 09:25*	*09/12/23 11:40*	*1*

Lab Sample ID: MB 880-62267/5-A
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 13:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 13:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 13:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 10:29	09/12/23 13:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 10:29	09/12/23 13:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 10:29	09/12/23 13:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*09/12/23 10:29*	*09/12/23 13:43*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/12/23 10:29*	*09/12/23 13:43*	*1*

Lab Sample ID: LCS 880-62267/1-A
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62267

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09402		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.1013		mg/Kg		101	70 - 130
Toluene	0.100	0.09562		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1992		mg/Kg		100	70 - 130
o-Xylene	0.100	0.1040		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: LCSD 880-62267/2-A
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62267

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09856		mg/Kg		99	70 - 130	5	35

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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

Lab Sample ID: LCSD 880-62267/2-A
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62267

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene			0.100	0.1051		mg/Kg		105	70 - 130	4	35
Toluene			0.100	0.09968		mg/Kg		100	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2079		mg/Kg		104	70 - 130	4	35
o-Xylene			0.100	0.1078		mg/Kg		108	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 880-32965-A-1-A MS
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.101	0.06289	F1	mg/Kg		62	70 - 130
Ethylbenzene	<0.00201	U F1	0.101	0.05009	F1	mg/Kg		49	70 - 130
Toluene	<0.00201	U F1	0.101	0.05270	F1	mg/Kg		52	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.09689	F1	mg/Kg		48	70 - 130
o-Xylene	<0.00201	U F1	0.101	0.05059	F1	mg/Kg		50	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-32965-A-1-B MSD
Matrix: Solid
Analysis Batch: 62265

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	0.06676	F1	mg/Kg		67	70 - 130	6	35
Ethylbenzene	<0.00201	U F1	0.0996	0.04948	F1	mg/Kg		49	70 - 130	1	35
Toluene	<0.00201	U F1	0.0996	0.05809	F1	mg/Kg		58	70 - 130	10	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.09306	F1	mg/Kg		47	70 - 130	4	35
o-Xylene	<0.00201	U F1	0.0996	0.04672	F1	mg/Kg		47	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 880-62272/5-A
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/12/23 22:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/12/23 22:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/12/23 22:17	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/12/23 11:43	09/12/23 22:17	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62272/5-A
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62272

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/12/23 11:43	09/12/23 22:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/12/23 11:43	09/12/23 22:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*09/12/23 11:43*	*09/12/23 22:17*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*09/12/23 11:43*	*09/12/23 22:17*	*1*

Lab Sample ID: LCS 880-62272/1-A
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62272

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09610		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.1043		mg/Kg		104	70 - 130
Toluene	0.100	0.09660		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.2233		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1130		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-62272/2-A
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62272

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09581		mg/Kg		96	70 - 130	0	35
Ethylbenzene	0.100	0.1096		mg/Kg		110	70 - 130	5	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2327		mg/Kg		116	70 - 130	4	35
o-Xylene	0.100	0.1177		mg/Kg		118	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: 890-5226-A-1-B MS
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.07731		mg/Kg		77	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.09084		mg/Kg		91	70 - 130
Toluene	<0.00200	U	0.0998	0.08191		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1915		mg/Kg		96	70 - 130
o-Xylene	<0.00200	U	0.0998	0.09648		mg/Kg		97	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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

Lab Sample ID: 890-5226-A-1-B MS
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62272

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 890-5226-A-1-C MSD
Matrix: Solid
Analysis Batch: 62238

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08297		mg/Kg		84	70 - 130	7	35
Ethylbenzene	<0.00200	U	0.0990	0.09286		mg/Kg		94	70 - 130	2	35
Toluene	<0.00200	U	0.0990	0.08431		mg/Kg		85	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1940		mg/Kg		98	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.09744		mg/Kg		98	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

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

Lab Sample ID: MB 880-62270/1-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62270

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/12/23 11:33	09/13/23 08:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*130*		*70 - 130*	*09/12/23 11:33*	*09/13/23 08:10*	*1*
o-Terphenyl	*111*		*70 - 130*	*09/12/23 11:33*	*09/13/23 08:10*	*1*

Lab Sample ID: LCS 880-62270/2-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62270

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1056		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	986.8		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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

Lab Sample ID: LCSD 880-62270/3-A
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62270

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1081		mg/Kg		108	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	980.9		mg/Kg		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 890-5230-1 MS
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: BH23-01 0'
Prep Type: Total/NA
Prep Batch: 62270

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	950.2		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1243		mg/Kg		121	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: 890-5230-1 MSD
Matrix: Solid
Analysis Batch: 62304

Client Sample ID: BH23-01 0'
Prep Type: Total/NA
Prep Batch: 62270

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1027		mg/Kg		100	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1392	F1	mg/Kg		135	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*149*	*S1+*	*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62366/1-A
Matrix: Solid
Analysis Batch: 62582

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		mg/Kg			09/15/23 09:02	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-62366/2-A
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-62366/3-A
Matrix: Solid
Analysis Batch: 62582

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	246.0		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 890-5230-7 MS
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: BH23-03 2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	166		250	399.0		mg/Kg		93	90 - 110		

Lab Sample ID: 890-5230-7 MSD
Matrix: Solid
Analysis Batch: 62582

Client Sample ID: BH23-03 2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	166		250	400.0		mg/Kg		94	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

GC VOA

Prep Batch: 62129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62129/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 62238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-11	BH23-05 0'	Total/NA	Solid	8021B	62272
890-5230-12	BH23--05 2'	Total/NA	Solid	8021B	62272
MB 880-62129/5-A	Method Blank	Total/NA	Solid	8021B	62129
MB 880-62272/5-A	Method Blank	Total/NA	Solid	8021B	62272
LCS 880-62272/1-A	Lab Control Sample	Total/NA	Solid	8021B	62272
LCSD 880-62272/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62272
890-5226-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	62272
890-5226-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62272

Analysis Batch: 62265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Total/NA	Solid	8021B	62267
890-5230-2	BH23-01 2'	Total/NA	Solid	8021B	62267
890-5230-3	BH23-01 4'	Total/NA	Solid	8021B	62267
890-5230-4	BH23-02 0'	Total/NA	Solid	8021B	62267
890-5230-5	BH23-02 2'	Total/NA	Solid	8021B	62267
890-5230-6	BH23-03 0'	Total/NA	Solid	8021B	62267
890-5230-7	BH23-03 2'	Total/NA	Solid	8021B	62267
890-5230-8	BH23-04 0'	Total/NA	Solid	8021B	62267
890-5230-9	BH23-04 2'	Total/NA	Solid	8021B	62267
890-5230-10	BH23-04 4'	Total/NA	Solid	8021B	62267
MB 880-62267/5-A	Method Blank	Total/NA	Solid	8021B	62267
LCS 880-62267/1-A	Lab Control Sample	Total/NA	Solid	8021B	62267
LCSD 880-62267/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62267
880-32965-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	62267
880-32965-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62267

Prep Batch: 62267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Total/NA	Solid	5035	
890-5230-2	BH23-01 2'	Total/NA	Solid	5035	
890-5230-3	BH23-01 4'	Total/NA	Solid	5035	
890-5230-4	BH23-02 0'	Total/NA	Solid	5035	
890-5230-5	BH23-02 2'	Total/NA	Solid	5035	
890-5230-6	BH23-03 0'	Total/NA	Solid	5035	
890-5230-7	BH23-03 2'	Total/NA	Solid	5035	
890-5230-8	BH23-04 0'	Total/NA	Solid	5035	
890-5230-9	BH23-04 2'	Total/NA	Solid	5035	
890-5230-10	BH23-04 4'	Total/NA	Solid	5035	
MB 880-62267/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62267/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62267/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-32965-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-32965-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

GC VOA

Prep Batch: 62272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-11	BH23-05 0'	Total/NA	Solid	5035	
890-5230-12	BH23--05 2'	Total/NA	Solid	5035	
MB 880-62272/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62272/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62272/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5226-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-5226-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 62358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Total/NA	Solid	Total BTEX	
890-5230-2	BH23-01 2'	Total/NA	Solid	Total BTEX	
890-5230-3	BH23-01 4'	Total/NA	Solid	Total BTEX	
890-5230-4	BH23-02 0'	Total/NA	Solid	Total BTEX	
890-5230-5	BH23-02 2'	Total/NA	Solid	Total BTEX	
890-5230-6	BH23-03 0'	Total/NA	Solid	Total BTEX	
890-5230-7	BH23-03 2'	Total/NA	Solid	Total BTEX	
890-5230-8	BH23-04 0'	Total/NA	Solid	Total BTEX	
890-5230-9	BH23-04 2'	Total/NA	Solid	Total BTEX	
890-5230-10	BH23-04 4'	Total/NA	Solid	Total BTEX	
890-5230-11	BH23-05 0'	Total/NA	Solid	Total BTEX	
890-5230-12	BH23--05 2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 62270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Total/NA	Solid	8015NM Prep	
890-5230-2	BH23-01 2'	Total/NA	Solid	8015NM Prep	
890-5230-3	BH23-01 4'	Total/NA	Solid	8015NM Prep	
890-5230-4	BH23-02 0'	Total/NA	Solid	8015NM Prep	
890-5230-5	BH23-02 2'	Total/NA	Solid	8015NM Prep	
890-5230-6	BH23-03 0'	Total/NA	Solid	8015NM Prep	
890-5230-7	BH23-03 2'	Total/NA	Solid	8015NM Prep	
890-5230-8	BH23-04 0'	Total/NA	Solid	8015NM Prep	
890-5230-9	BH23-04 2'	Total/NA	Solid	8015NM Prep	
890-5230-10	BH23-04 4'	Total/NA	Solid	8015NM Prep	
890-5230-11	BH23-05 0'	Total/NA	Solid	8015NM Prep	
890-5230-12	BH23--05 2'	Total/NA	Solid	8015NM Prep	
MB 880-62270/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62270/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5230-1 MS	BH23-01 0'	Total/NA	Solid	8015NM Prep	
890-5230-1 MSD	BH23-01 0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Total/NA	Solid	8015B NM	62270
890-5230-2	BH23-01 2'	Total/NA	Solid	8015B NM	62270
890-5230-3	BH23-01 4'	Total/NA	Solid	8015B NM	62270
890-5230-4	BH23-02 0'	Total/NA	Solid	8015B NM	62270

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

GC Semi VOA (Continued)

Analysis Batch: 62304 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-5	BH23-02 2'	Total/NA	Solid	8015B NM	62270
890-5230-6	BH23-03 0'	Total/NA	Solid	8015B NM	62270
890-5230-7	BH23-03 2'	Total/NA	Solid	8015B NM	62270
890-5230-8	BH23-04 0'	Total/NA	Solid	8015B NM	62270
890-5230-9	BH23-04 2'	Total/NA	Solid	8015B NM	62270
890-5230-10	BH23-04 4'	Total/NA	Solid	8015B NM	62270
890-5230-11	BH23-05 0'	Total/NA	Solid	8015B NM	62270
890-5230-12	BH23--05 2'	Total/NA	Solid	8015B NM	62270
MB 880-62270/1-A	Method Blank	Total/NA	Solid	8015B NM	62270
LCS 880-62270/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62270
LCSD 880-62270/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62270
890-5230-1 MS	BH23-01 0'	Total/NA	Solid	8015B NM	62270
890-5230-1 MSD	BH23-01 0'	Total/NA	Solid	8015B NM	62270

HPLC/IC

Leach Batch: 62366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Soluble	Solid	DI Leach	
890-5230-2	BH23-01 2'	Soluble	Solid	DI Leach	
890-5230-3	BH23-01 4'	Soluble	Solid	DI Leach	
890-5230-4	BH23-02 0'	Soluble	Solid	DI Leach	
890-5230-5	BH23-02 2'	Soluble	Solid	DI Leach	
890-5230-6	BH23-03 0'	Soluble	Solid	DI Leach	
890-5230-7	BH23-03 2'	Soluble	Solid	DI Leach	
890-5230-8	BH23-04 0'	Soluble	Solid	DI Leach	
890-5230-9	BH23-04 2'	Soluble	Solid	DI Leach	
890-5230-10	BH23-04 4'	Soluble	Solid	DI Leach	
890-5230-11	BH23-05 0'	Soluble	Solid	DI Leach	
890-5230-12	BH23--05 2'	Soluble	Solid	DI Leach	
MB 880-62366/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62366/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62366/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5230-7 MS	BH23-03 2'	Soluble	Solid	DI Leach	
890-5230-7 MSD	BH23-03 2'	Soluble	Solid	DI Leach	

Analysis Batch: 62582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5230-1	BH23-01 0'	Soluble	Solid	300.0	62366
890-5230-2	BH23-01 2'	Soluble	Solid	300.0	62366
890-5230-3	BH23-01 4'	Soluble	Solid	300.0	62366
890-5230-4	BH23-02 0'	Soluble	Solid	300.0	62366
890-5230-5	BH23-02 2'	Soluble	Solid	300.0	62366
890-5230-6	BH23-03 0'	Soluble	Solid	300.0	62366
890-5230-7	BH23-03 2'	Soluble	Solid	300.0	62366
890-5230-8	BH23-04 0'	Soluble	Solid	300.0	62366
890-5230-9	BH23-04 2'	Soluble	Solid	300.0	62366
890-5230-10	BH23-04 4'	Soluble	Solid	300.0	62366
890-5230-11	BH23-05 0'	Soluble	Solid	300.0	62366
890-5230-12	BH23--05 2'	Soluble	Solid	300.0	62366
MB 880-62366/1-A	Method Blank	Soluble	Solid	300.0	62366

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

HPLC/IC (Continued)

Analysis Batch: 62582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-62366/2-A	Lab Control Sample	Soluble	Solid	300.0	62366
LCSD 880-62366/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62366
890-5230-7 MS	BH23-03 2'	Soluble	Solid	300.0	62366
890-5230-7 MSD	BH23-03 2'	Soluble	Solid	300.0	62366

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-01 0'

Lab Sample ID: 890-5230-1
Matrix: Solid
Date Collected: 09/08/23 11:03
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 19:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 11:07	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		20			62582	09/15/23 10:51	CH	EET MID

Client Sample ID: BH23-01 2'

Lab Sample ID: 890-5230-2
Matrix: Solid
Date Collected: 09/08/23 11:13
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 20:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 12:12	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		10			62582	09/15/23 14:06	CH	EET MID

Client Sample ID: BH23-01 4'

Lab Sample ID: 890-5230-3
Matrix: Solid
Date Collected: 09/08/23 11:52
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 20:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 12:34	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		20			62582	09/15/23 14:12	CH	EET MID

Client Sample ID: BH23-02 0'

Lab Sample ID: 890-5230-4
Matrix: Solid
Date Collected: 09/08/23 12:02
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 21:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 12:57	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-02 0'

Lab Sample ID: 890-5230-4
Matrix: Solid
Date Collected: 09/08/23 12:02
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		20			62582	09/15/23 14:19	CH	EET MID

Client Sample ID: BH23-02 2'

Lab Sample ID: 890-5230-5
Matrix: Solid
Date Collected: 09/08/23 12:10
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 21:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 13:19	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 14:26	CH	EET MID

Client Sample ID: BH23-03 0'

Lab Sample ID: 890-5230-6
Matrix: Solid
Date Collected: 09/08/23 12:15
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 21:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 13:40	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		10			62582	09/15/23 14:32	CH	EET MID

Client Sample ID: BH23-03 2'

Lab Sample ID: 890-5230-7
Matrix: Solid
Date Collected: 09/08/23 12:32
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 22:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 14:03	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 14:39	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-04 0'

Lab Sample ID: 890-5230-8
Matrix: Solid
Date Collected: 09/08/23 12:40
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 22:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 14:25	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		20			62582	09/15/23 14:59	CH	EET MID

Client Sample ID: BH23-04 2'

Lab Sample ID: 890-5230-9
Matrix: Solid
Date Collected: 09/08/23 12:47
Date Received: 09/11/23 09:12

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	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 23:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 14:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		20			62582	09/15/23 15:06	CH	EET MID

Client Sample ID: BH23-04 4'

Lab Sample ID: 890-5230-10
Matrix: Solid
Date Collected: 09/08/23 13:01
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62267	09/12/23 10:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62265	09/12/23 23:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 15:08	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		10			62582	09/15/23 15:26	CH	EET MID

Client Sample ID: BH23-05 0'

Lab Sample ID: 890-5230-11
Matrix: Solid
Date Collected: 09/08/23 13:13
Date Received: 09/11/23 09:12

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	62272	09/12/23 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62238	09/13/23 05:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 15:53	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Client Sample ID: BH23-05 0'

Lab Sample ID: 890-5230-11
Matrix: Solid
Date Collected: 09/08/23 13:13
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		10			62582	09/15/23 15:32	CH	EET MID

Client Sample ID: BH23--05 2'

Lab Sample ID: 890-5230-12
Matrix: Solid
Date Collected: 09/08/23 13:27
Date Received: 09/11/23 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62272	09/12/23 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62238	09/13/23 06:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62358	09/13/23 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	62270	09/12/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62304	09/13/23 16:15	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62366	09/13/23 14:20	AG	EET MID
Soluble	Analysis	300.0		1			62582	09/15/23 15:39	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5230-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5230-1	BH23-01 0'	Solid	09/08/23 11:03	09/11/23 09:12	0'
890-5230-2	BH23-01 2'	Solid	09/08/23 11:13	09/11/23 09:12	2'
890-5230-3	BH23-01 4'	Solid	09/08/23 11:52	09/11/23 09:12	4'
890-5230-4	BH23-02 0'	Solid	09/08/23 12:02	09/11/23 09:12	0'
890-5230-5	BH23-02 2'	Solid	09/08/23 12:10	09/11/23 09:12	2'
890-5230-6	BH23-03 0'	Solid	09/08/23 12:15	09/11/23 09:12	0'
890-5230-7	BH23-03 2'	Solid	09/08/23 12:32	09/11/23 09:12	2'
890-5230-8	BH23-04 0'	Solid	09/08/23 12:40	09/11/23 09:12	0'
890-5230-9	BH23-04 2'	Solid	09/08/23 12:47	09/11/23 09:12	2'
890-5230-10	BH23-04 4'	Solid	09/08/23 13:01	09/11/23 09:12	4'
890-5230-11	BH23-05 0'	Solid	09/08/23 13:13	09/11/23 09:12	0'
890-5230-12	BH23--05 2'	Solid	09/08/23 13:27	09/11/23 09:12	2'

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Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page 1 of 2

Project Manager:	Chance Arxon	Bill to: (if different)	Solaris - Rob Kink
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:		City, State ZIP:	carxon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☒ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	9.18.23
Sampler's Name:	Heusavan Costafilho	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:	TNM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015 M	Cl
BH23-01	0'		9.08.23	11:03	0'	grab	1		✓	✓	✓
BH23-01	2'			11:13	2'		2				
BH23-01	4'			11:52	4'						
BH23-02	0'			12:02	0'						
BH23-02	2'			12:10	2'						
BH23-03	0'			12:15	0'						
BH23-03	2'			12:32	2'						
BH23-04	0'			12:40	0'						
BH23-04	2'			12:47	2'						
BH23-04	4'		↓	13:01	4'	↓	↓		↓	↓	↓

890-5230 Chain of Custody

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 Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9-11-23 09:12	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc Heusavan CostaFilho at Hcostafilho@vertex.ca

9/18/2023

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5230-1
SDG Number: 23E-04909

Login Number: 5230
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5230-1
SDG Number: 23E-04909

Login Number: 5230
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/12/23 11:10 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

Mobley Water
SDG NUMBER 23E-04909

JOB NUMBER

890-5264-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 3/12/2025 9:46:11 AM

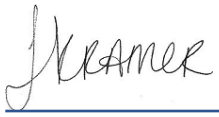
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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9/20/2023 4:49:09 PM

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

Client: Vertex
Project/Site: Mobley Water

Laboratory Job ID: 890-5264-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 16
QC Sample Results 18
QC Association Summary 26
Lab Chronicle 30
Certification Summary 34
Method Summary 35
Sample Summary 36
Chain of Custody 37
Receipt Checklists 39

Definitions/Glossary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Job ID: 890-5264-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5264-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/13/2023 9:42 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 11.8°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-09 (890-5264-1), BH23-09 (890-5264-2), BH23-10 (890-5264-3), BH23-10 (890-5264-4), BH23-11 (890-5264-5), BH23-06 (890-5264-6), BH23-06 (890-5264-7), BH23-07 (890-5264-8), BH23-07 (890-5264-9), BH23-07 (890-5264-10), BH23-08 (890-5264-11) and BH23-08 (890-5264-12).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62674 and analytical batch 880-62672 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-62804 recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62590 and analytical batch 880-62804 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-62804/2) and (CCV 880-62804/33). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-62804/51). Evidence of matrix interferences is not obvious.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-62590 and 880-62598 and analytical batch 880-62804 was outside the control limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-33291-A-17-C). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-09 (890-5264-1) and BH23-09 (890-5264-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-06 (890-5264-7) and BH23-07

Case Narrative

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Job ID: 890-5264-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

(890-5264-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-62618 and analytical batch 880-62664 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-33326-A-75-B), (880-33326-A-75-C MS) and (880-33326-A-75-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62664/31), (CCV 880-62664/45) and (LCS 880-62618/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-62618 and analytical batch 880-62664 was outside control limits. Sample non-homogeneity is suspected.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH23-08 (890-5264-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62612 and analytical batch 880-62734 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Released to Imaging: 3/12/2025 9:46:11 AM

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-09

Date Collected: 09/12/23 12:45
Date Received: 09/13/23 09:42
Sample Depth: 0

Lab Sample ID: 890-5264-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 10:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 10:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 10:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 10:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 10:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/15/23 13:49*	*09/20/23 10:58*	*1*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*09/15/23 13:49*	*09/20/23 10:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 10:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/15/23 12:04	09/15/23 23:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/15/23 12:04	09/15/23 23:47	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/15/23 12:04	09/15/23 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/15/23 23:47*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/15/23 23:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26600**		249		mg/Kg			09/17/23 22:17	50

Client Sample ID: BH23-09

Date Collected: 09/12/23 13:15
Date Received: 09/13/23 09:42
Sample Depth: 1

Lab Sample ID: 890-5264-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 11:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 11:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 11:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 11:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 11:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 11:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*09/15/23 13:49*	*09/20/23 11:25*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/15/23 13:49*	*09/20/23 11:25*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-09

Date Collected: 09/12/23 13:15
Date Received: 09/13/23 09:42
Sample Depth: 1

Lab Sample ID: 890-5264-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 11:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/15/23 12:04	09/16/23 00:09	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/15/23 12:04	09/16/23 00:09	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/15/23 12:04	09/16/23 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 00:09*	*1*
o-Terphenyl	*146*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 00:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6840**		100		mg/Kg			09/17/23 22:24	20

Client Sample ID: BH23-10

Date Collected: 09/12/23 14:00
Date Received: 09/13/23 09:42
Sample Depth: 0

Lab Sample ID: 890-5264-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 11:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 11:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 11:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/15/23 13:49	09/20/23 11:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/15/23 13:49	09/20/23 11:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*09/15/23 13:49*	*09/20/23 11:51*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/15/23 13:49*	*09/20/23 11:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/20/23 11:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/15/23 12:04	09/16/23 00:31	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/15/23 12:04	09/16/23 00:31	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/15/23 12:04	09/16/23 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/15/23 12:04*	*09/16/23 00:31*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/15/23 12:04*	*09/16/23 00:31*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-10
Date Collected: 09/12/23 14:00
Date Received: 09/13/23 09:42
Sample Depth: 0

Lab Sample ID: 890-5264-3
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	188	F1	4.97		mg/Kg			09/17/23 22:30	1

Client Sample ID: BH23-10
Date Collected: 09/12/23 14:15
Date Received: 09/13/23 09:42
Sample Depth: 2

Lab Sample ID: 890-5264-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 12:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 12:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/15/23 13:49*	*09/20/23 12:17*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/15/23 13:49*	*09/20/23 12:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 12:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 00:52	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 00:52	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*09/15/23 12:04*	*09/16/23 00:52*	*1*
o-Terphenyl	*110*		*70 - 130*	*09/15/23 12:04*	*09/16/23 00:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	195		4.99		mg/Kg			09/17/23 22:50	1

Client Sample ID: BH23-11
Date Collected: 09/12/23 14:30
Date Received: 09/13/23 09:42
Sample Depth: 0

Lab Sample ID: 890-5264-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:44	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:44	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:44	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 12:44	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-11

Lab Sample ID: 890-5264-5
Matrix: Solid
Date Collected: 09/12/23 14:30
Date Received: 09/13/23 09:42
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 12:44	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*09/15/23 13:49*	*09/20/23 12:44*	*1*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*09/15/23 13:49*	*09/20/23 12:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 12:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/15/23 12:04	09/16/23 01:14	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/15/23 12:04	09/16/23 01:14	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/15/23 12:04	09/16/23 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/15/23 12:04*	*09/16/23 01:14*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/15/23 12:04*	*09/16/23 01:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13700**		253		mg/Kg			09/17/23 22:57	50

Client Sample ID: BH23-06

Lab Sample ID: 890-5264-6
Matrix: Solid
Date Collected: 09/11/23 11:34
Date Received: 09/13/23 09:42
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 13:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 13:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/15/23 13:49*	*09/20/23 13:10*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/15/23 13:49*	*09/20/23 13:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 13:10	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-06

Lab Sample ID: 890-5264-6
Matrix: Solid
Date Collected: 09/11/23 11:34
Date Received: 09/13/23 09:42
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 01:36	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 01:36	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/15/23 12:04	09/16/23 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/15/23 12:04*	*09/16/23 01:36*	*1*
o-Terphenyl	*121*		*70 - 130*	*09/15/23 12:04*	*09/16/23 01:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**620**		5.00		mg/Kg			09/17/23 23:17	1

Client Sample ID: BH23-06

Lab Sample ID: 890-5264-7
Matrix: Solid
Date Collected: 09/11/23 15:05
Date Received: 09/13/23 09:42
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 13:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/15/23 13:49	09/20/23 13:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/15/23 13:49	09/20/23 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/15/23 13:49*	*09/20/23 13:37*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/15/23 13:49*	*09/20/23 13:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		09/15/23 12:04	09/16/23 01:58	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		09/15/23 12:04	09/16/23 01:58	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		09/15/23 12:04	09/16/23 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 01:58*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 01:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**137**		5.02		mg/Kg			09/17/23 23:24	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-07

Date Collected: 09/11/23 12:12
Date Received: 09/13/23 09:42
Sample Depth: 0

Lab Sample ID: 890-5264-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/15/23 13:49	09/20/23 14:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/15/23 13:49	09/20/23 14:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:03*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/20/23 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/15/23 12:04	09/16/23 02:20	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/15/23 12:04	09/16/23 02:20	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/15/23 12:04	09/16/23 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*150*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 02:20*	*1*
o-Terphenyl	*156*	*S1+*	*70 - 130*	*09/15/23 12:04*	*09/16/23 02:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**444**		5.00		mg/Kg			09/17/23 23:30	1

Client Sample ID: BH23-07

Date Collected: 09/11/23 12:22
Date Received: 09/13/23 09:42
Sample Depth: 2

Lab Sample ID: 890-5264-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 14:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 14:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 14:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 14:29	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/15/23 13:49	09/20/23 14:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/15/23 13:49	09/20/23 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:29*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:29*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-07

Lab Sample ID: 890-5264-9
Matrix: Solid
Date Collected: 09/11/23 12:22
Date Received: 09/13/23 09:42
Sample Depth: 2

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/23 12:04	09/16/23 02:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/23 12:04	09/16/23 02:42	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/23 12:04	09/16/23 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/15/23 12:04*	*09/16/23 02:42*	*1*
o-Terphenyl	*124*		*70 - 130*	*09/15/23 12:04*	*09/16/23 02:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2550**		49.9		mg/Kg			09/17/23 23:37	10

Client Sample ID: BH23-07

Lab Sample ID: 890-5264-10
Matrix: Solid
Date Collected: 09/11/23 12:37
Date Received: 09/13/23 09:42
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/15/23 13:49	09/20/23 14:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/15/23 13:49	09/20/23 14:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:55*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/15/23 13:49*	*09/20/23 14:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/20/23 14:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/19/23 00:23	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/19/23 00:23	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/19/23 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*09/15/23 17:54*	*09/19/23 00:23*	*1*
o-Terphenyl	*114*		*70 - 130*	*09/15/23 17:54*	*09/19/23 00:23*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-07

Lab Sample ID: 890-5264-10
Matrix: Solid
Date Collected: 09/11/23 12:37
Date Received: 09/13/23 09:42
Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2040		50.3		mg/Kg			09/17/23 23:44	10

Client Sample ID: BH23-08

Lab Sample ID: 890-5264-11
Matrix: Solid
Date Collected: 09/11/23 13:01
Date Received: 09/13/23 09:42
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/18/23 08:54	09/19/23 05:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/18/23 08:54	09/19/23 05:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*09/18/23 08:54*	*09/19/23 05:26*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/18/23 08:54*	*09/19/23 05:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/19/23 05:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/18/23 20:03	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/18/23 20:03	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/15/23 17:54	09/18/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/15/23 17:54*	*09/18/23 20:03*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*09/15/23 17:54*	*09/18/23 20:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		4.99		mg/Kg			09/17/23 23:50	1

Client Sample ID: BH23-08

Lab Sample ID: 890-5264-12
Matrix: Solid
Date Collected: 09/11/23 13:10
Date Received: 09/13/23 09:42
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/18/23 08:54	09/19/23 05:46	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-08

Date Collected: 09/11/23 13:10
Date Received: 09/13/23 09:42
Sample Depth: 2

Lab Sample ID: 890-5264-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/18/23 08:54	09/19/23 05:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:54	09/19/23 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/18/23 08:54*	*09/19/23 05:46*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*09/18/23 08:54*	*09/19/23 05:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/19/23 05:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/15/23 17:54	09/18/23 20:25	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/15/23 17:54	09/18/23 20:25	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/15/23 17:54	09/18/23 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/15/23 17:54*	*09/18/23 20:25*	*1*
o-Terphenyl	*105*		*70 - 130*	*09/15/23 17:54*	*09/18/23 20:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**127**		4.95		mg/Kg			09/17/23 23:57	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-33310-A-2-B MS	Matrix Spike	86	99
880-33310-A-2-C MSD	Matrix Spike Duplicate	108	121
890-5264-1	BH23-09	116	126
890-5264-2	BH23-09	112	99
890-5264-3	BH23-10	113	112
890-5264-4	BH23-10	105	90
890-5264-5	BH23-11	121	126
890-5264-6	BH23-06	102	103
890-5264-7	BH23-06	102	90
890-5264-8	BH23-07	116	110
890-5264-9	BH23-07	122	118
890-5264-10	BH23-07	96	93
890-5264-11	BH23-08	79	92
890-5264-12	BH23-08	94	71
890-5274-A-21-A MS	Matrix Spike	102	115
890-5274-A-21-B MSD	Matrix Spike Duplicate	99	106
LCS 880-62590/1-A	Lab Control Sample	91	108
LCS 880-62599/1-A	Lab Control Sample	100	115
LCSD 880-62590/2-A	Lab Control Sample Dup	90	98
LCSD 880-62599/2-A	Lab Control Sample Dup	100	106
MB 880-62590/5-A	Method Blank	57 S1-	97
MB 880-62598/5-A	Method Blank	54 S1-	99
MB 880-62599/5-A	Method Blank	71	98
MB 880-62674/5-A	Method Blank	69 S1-	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-33291-A-17-D MS	Matrix Spike	112	110
880-33291-A-17-E MSD	Matrix Spike Duplicate	122	116
880-33326-A-75-C MS	Matrix Spike	169 S1+	141 S1+
880-33326-A-75-D MSD	Matrix Spike Duplicate	145 S1+	121
890-5264-1	BH23-09	133 S1+	140 S1+
890-5264-2	BH23-09	140 S1+	146 S1+
890-5264-3	BH23-10	117	125
890-5264-4	BH23-10	103	110
890-5264-5	BH23-11	117	125
890-5264-6	BH23-06	117	121
890-5264-7	BH23-06	135 S1+	142 S1+
890-5264-8	BH23-07	150 S1+	156 S1+
890-5264-9	BH23-07	117	124
890-5264-10	BH23-07	128	114
890-5264-11	BH23-08	132 S1+	136 S1+

Surrogate Summary

Client: Vertex Job ID: 890-5264-1
Project/Site: Mobley Water SDG: 23E-04909

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-5264-12	BH23-08	105	105								
LCS 880-62583/2-A	Lab Control Sample	96	106								
LCS 880-62618/2-A	Lab Control Sample	115	135 S1+								
LCSD 880-62583/3-A	Lab Control Sample Dup	87	97								
LCSD 880-62618/3-A	Lab Control Sample Dup	103	101								
MB 880-62583/1-A	Method Blank	121	128								
MB 880-62618/1-A	Method Blank	156 S1+	139 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62590/5-A
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 04:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 04:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 04:47	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/15/23 13:49	09/20/23 04:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/15/23 13:49	09/20/23 04:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/23 13:49	09/20/23 04:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*57*	*S1-*	*70 - 130*	*09/15/23 13:49*	*09/20/23 04:47*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/15/23 13:49*	*09/20/23 04:47*	*1*

Lab Sample ID: LCS 880-62590/1-A
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62590

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1028		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.09445		mg/Kg		94	70 - 130		
Toluene			0.100	0.1030		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.1866		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09807		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-62590/2-A
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62590

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08752		mg/Kg		88	70 - 130	16	35
Ethylbenzene			0.100	0.09176		mg/Kg		92	70 - 130	3	35
Toluene			0.100	0.1068		mg/Kg		107	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1873		mg/Kg		94	70 - 130	0	35
o-Xylene			0.100	0.09267		mg/Kg		93	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-33310-A-2-B MS
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62590

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1 F2	0.100	0.02344	F1	mg/Kg		23	70 - 130		
Ethylbenzene	<0.00201	U	0.100	0.08205		mg/Kg		81	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: 880-33310-A-2-B MS
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62590

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00201	U F1	0.100	0.03009	F1	mg/Kg		30	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.04073	F1	mg/Kg		20	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.06057	F1	mg/Kg		60	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-33310-A-2-C MSD
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62590

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1 F2	0.0996	0.004326	F2 F1	mg/Kg		4	70 - 130	138	35
Ethylbenzene	<0.00201	U	0.0996	0.09249		mg/Kg		92	70 - 130	12	35
Toluene	<0.00201	U F1	0.0996	0.03978	F1	mg/Kg		40	70 - 130	28	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.05199	F1	mg/Kg		26	70 - 130	24	35
o-Xylene	<0.00201	U F1	0.0996	0.07715		mg/Kg		77	70 - 130	24	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

Lab Sample ID: MB 880-62598/5-A
Matrix: Solid
Analysis Batch: 62804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/15/23 15:05	09/19/23 14:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/15/23 15:05	09/19/23 14:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/15/23 15:05	09/19/23 14:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/15/23 15:05	09/19/23 14:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/15/23 15:05	09/19/23 14:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/15/23 15:05	09/19/23 14:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*54*	*S1-*	*70 - 130*	*09/15/23 15:05*	*09/19/23 14:58*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/15/23 15:05*	*09/19/23 14:58*	*1*

Lab Sample ID: MB 880-62599/5-A
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/18/23 15:08	09/18/23 21:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/18/23 15:08	09/18/23 21:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/18/23 15:08	09/18/23 21:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/18/23 15:08	09/18/23 21:54	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62599/5-A
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62599

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/18/23 15:08	09/18/23 21:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/18/23 15:08	09/18/23 21:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*09/18/23 15:08*	*09/18/23 21:54*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/18/23 15:08*	*09/18/23 21:54*	*1*

Lab Sample ID: LCS 880-62599/1-A
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62599

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07810		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.08259		mg/Kg		83	70 - 130
Toluene	0.100	0.08476		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1713		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08671		mg/Kg		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: LCSD 880-62599/2-A
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62599

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08604		mg/Kg		86	70 - 130	10	35
Ethylbenzene	0.100	0.08613		mg/Kg		86	70 - 130	4	35
Toluene	0.100	0.08846		mg/Kg		88	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1791		mg/Kg		90	70 - 130	4	35
o-Xylene	0.100	0.09090		mg/Kg		91	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-5274-A-21-A MS
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62599

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08115		mg/Kg		81	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.08302		mg/Kg		83	70 - 130
Toluene	<0.00199	U	0.0998	0.08570		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1706		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08580		mg/Kg		86	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: 890-5274-A-21-A MS
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62599

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 890-5274-A-21-B MSD
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62599

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.07875		mg/Kg		79	70 - 130	3	35
Ethylbenzene	<0.00199	U	0.0996	0.07757		mg/Kg		78	70 - 130	7	35
Toluene	<0.00199	U	0.0996	0.08119		mg/Kg		82	70 - 130	5	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1592		mg/Kg		80	70 - 130	7	35
o-Xylene	<0.00199	U	0.0996	0.07997		mg/Kg		80	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: MB 880-62674/5-A
Matrix: Solid
Analysis Batch: 62672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62674

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:50	09/18/23 11:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:50	09/18/23 11:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:50	09/18/23 11:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/18/23 08:50	09/18/23 11:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/18/23 08:50	09/18/23 11:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/18/23 08:50	09/18/23 11:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	09/18/23 08:50	09/18/23 11:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/18/23 08:50	09/18/23 11:16	1

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

Lab Sample ID: MB 880-62583/1-A
Matrix: Solid
Analysis Batch: 62511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/23 12:04	09/15/23 17:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/23 12:04	09/15/23 17:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/23 12:04	09/15/23 17:38	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62583/1-A
Matrix: Solid
Analysis Batch: 62511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62583

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	09/15/23 12:04	09/15/23 17:38	1
o-Terphenyl	128		70 - 130	09/15/23 12:04	09/15/23 17:38	1

Lab Sample ID: LCS 880-62583/2-A
Matrix: Solid
Analysis Batch: 62511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62583

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1109		mg/Kg		111	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1003		mg/Kg		100	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-62583/3-A
Matrix: Solid
Analysis Batch: 62511

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62583

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	990.9		mg/Kg		99	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	847.5		mg/Kg		85	70 - 130	17	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 880-33291-A-17-D MS
Matrix: Solid
Analysis Batch: 62511

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62583

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	993	1131		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	98.9		993	853.5		mg/Kg		76	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	110		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: 880-33291-A-17-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62511 — **Prep Batch: 62583**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	993	1252		mg/Kg		122	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	98.9		993	919.4		mg/Kg		83	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: MB 880-62618/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62664 — **Prep Batch: 62618**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/23 17:54	09/18/23 20:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/23 17:54	09/18/23 20:03	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/23 17:54	09/18/23 20:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*156*	*S1+*	*70 - 130*	*09/15/23 17:54*	*09/18/23 20:03*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*09/15/23 17:54*	*09/18/23 20:03*	*1*

Lab Sample ID: LCS 880-62618/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62664 — **Prep Batch: 62618**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1008		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	966.1		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*135*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-62618/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62664 — **Prep Batch: 62618**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	891.8		mg/Kg		89	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	953.4		mg/Kg		95	70 - 130	1	20

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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

Lab Sample ID: LCSD 880-62618/3-A
Matrix: Solid
Analysis Batch: 62664

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62618

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-33326-A-75-C MS
Matrix: Solid
Analysis Batch: 62664

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62618

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U F2	993	1064		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	993	1301		mg/Kg		129	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	169	S1+	70 - 130
o-Terphenyl	141	S1+	70 - 130

Lab Sample ID: 880-33326-A-75-D MSD
Matrix: Solid
Analysis Batch: 62664

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62618

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U F2	993	860.6	F2	mg/Kg		83	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<50.3	U	993	1110		mg/Kg		110	70 - 130	16	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	145	S1+	70 - 130
o-Terphenyl	121		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62612/1-A
Matrix: Solid
Analysis Batch: 62734

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		mg/Kg			09/17/23 20:37	1

Lab Sample ID: LCS 880-62612/2-A
Matrix: Solid
Analysis Batch: 62734

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.1		mg/Kg		98	90 - 110

QC Sample Results

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-62612/3-A
Matrix: Solid
Analysis Batch: 62734

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	245.7		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-5264-3 MS
Matrix: Solid
Analysis Batch: 62734

Client Sample ID: BH23-10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	188	F1	249	396.3	F1	mg/Kg		84	90 - 110

Lab Sample ID: 890-5264-3 MSD
Matrix: Solid
Analysis Batch: 62734

Client Sample ID: BH23-10
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	188	F1	249	395.1	F1	mg/Kg		83	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

GC VOA

Prep Batch: 62590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Total/NA	Solid	5035	
890-5264-2	BH23-09	Total/NA	Solid	5035	
890-5264-3	BH23-10	Total/NA	Solid	5035	
890-5264-4	BH23-10	Total/NA	Solid	5035	
890-5264-5	BH23-11	Total/NA	Solid	5035	
890-5264-6	BH23-06	Total/NA	Solid	5035	
890-5264-7	BH23-06	Total/NA	Solid	5035	
890-5264-8	BH23-07	Total/NA	Solid	5035	
890-5264-9	BH23-07	Total/NA	Solid	5035	
890-5264-10	BH23-07	Total/NA	Solid	5035	
MB 880-62590/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62590/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62590/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33310-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
880-33310-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 62598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62598/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 62599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-11	BH23-08	Total/NA	Solid	5035	
890-5264-12	BH23-08	Total/NA	Solid	5035	
MB 880-62599/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62599/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62599/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5274-A-21-A MS	Matrix Spike	Total/NA	Solid	5035	
890-5274-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 62672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-11	BH23-08	Total/NA	Solid	8021B	62599
890-5264-12	BH23-08	Total/NA	Solid	8021B	62599
MB 880-62599/5-A	Method Blank	Total/NA	Solid	8021B	62599
MB 880-62674/5-A	Method Blank	Total/NA	Solid	8021B	62674
LCS 880-62599/1-A	Lab Control Sample	Total/NA	Solid	8021B	62599
LCSD 880-62599/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62599
890-5274-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	62599
890-5274-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62599

Prep Batch: 62674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-62674/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 62802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Total/NA	Solid	Total BTEX	
890-5264-2	BH23-09	Total/NA	Solid	Total BTEX	
890-5264-3	BH23-10	Total/NA	Solid	Total BTEX	
890-5264-4	BH23-10	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

GC VOA (Continued)

Analysis Batch: 62802 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-5	BH23-11	Total/NA	Solid	Total BTEX	
890-5264-6	BH23-06	Total/NA	Solid	Total BTEX	
890-5264-7	BH23-06	Total/NA	Solid	Total BTEX	
890-5264-8	BH23-07	Total/NA	Solid	Total BTEX	
890-5264-9	BH23-07	Total/NA	Solid	Total BTEX	
890-5264-10	BH23-07	Total/NA	Solid	Total BTEX	
890-5264-11	BH23-08	Total/NA	Solid	Total BTEX	
890-5264-12	BH23-08	Total/NA	Solid	Total BTEX	

Analysis Batch: 62804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Total/NA	Solid	8021B	62590
890-5264-2	BH23-09	Total/NA	Solid	8021B	62590
890-5264-3	BH23-10	Total/NA	Solid	8021B	62590
890-5264-4	BH23-10	Total/NA	Solid	8021B	62590
890-5264-5	BH23-11	Total/NA	Solid	8021B	62590
890-5264-6	BH23-06	Total/NA	Solid	8021B	62590
890-5264-7	BH23-06	Total/NA	Solid	8021B	62590
890-5264-8	BH23-07	Total/NA	Solid	8021B	62590
890-5264-9	BH23-07	Total/NA	Solid	8021B	62590
890-5264-10	BH23-07	Total/NA	Solid	8021B	62590
MB 880-62590/5-A	Method Blank	Total/NA	Solid	8021B	62590
MB 880-62598/5-A	Method Blank	Total/NA	Solid	8021B	62598
LCS 880-62590/1-A	Lab Control Sample	Total/NA	Solid	8021B	62590
LCSD 880-62590/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62590
880-33310-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	62590
880-33310-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	62590

GC Semi VOA

Analysis Batch: 62511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Total/NA	Solid	8015B NM	62583
890-5264-2	BH23-09	Total/NA	Solid	8015B NM	62583
890-5264-3	BH23-10	Total/NA	Solid	8015B NM	62583
890-5264-4	BH23-10	Total/NA	Solid	8015B NM	62583
890-5264-5	BH23-11	Total/NA	Solid	8015B NM	62583
890-5264-6	BH23-06	Total/NA	Solid	8015B NM	62583
890-5264-7	BH23-06	Total/NA	Solid	8015B NM	62583
890-5264-8	BH23-07	Total/NA	Solid	8015B NM	62583
890-5264-9	BH23-07	Total/NA	Solid	8015B NM	62583
MB 880-62583/1-A	Method Blank	Total/NA	Solid	8015B NM	62583
LCS 880-62583/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62583
LCSD 880-62583/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62583
880-33291-A-17-D MS	Matrix Spike	Total/NA	Solid	8015B NM	62583
880-33291-A-17-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62583

Prep Batch: 62583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Total/NA	Solid	8015NM Prep	
890-5264-2	BH23-09	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

GC Semi VOA (Continued)

Prep Batch: 62583 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-3	BH23-10	Total/NA	Solid	8015NM Prep	
890-5264-4	BH23-10	Total/NA	Solid	8015NM Prep	
890-5264-5	BH23-11	Total/NA	Solid	8015NM Prep	
890-5264-6	BH23-06	Total/NA	Solid	8015NM Prep	
890-5264-7	BH23-06	Total/NA	Solid	8015NM Prep	
890-5264-8	BH23-07	Total/NA	Solid	8015NM Prep	
890-5264-9	BH23-07	Total/NA	Solid	8015NM Prep	
MB 880-62583/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62583/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62583/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33291-A-17-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33291-A-17-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 62618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-10	BH23-07	Total/NA	Solid	8015NM Prep	
890-5264-11	BH23-08	Total/NA	Solid	8015NM Prep	
890-5264-12	BH23-08	Total/NA	Solid	8015NM Prep	
MB 880-62618/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62618/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33326-A-75-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33326-A-75-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-10	BH23-07	Total/NA	Solid	8015B NM	62618
MB 880-62618/1-A	Method Blank	Total/NA	Solid	8015B NM	62618
LCS 880-62618/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62618
LCSD 880-62618/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62618
880-33326-A-75-C MS	Matrix Spike	Total/NA	Solid	8015B NM	62618
880-33326-A-75-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62618

Analysis Batch: 62666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-11	BH23-08	Total/NA	Solid	8015B NM	62618
890-5264-12	BH23-08	Total/NA	Solid	8015B NM	62618

HPLC/IC

Leach Batch: 62612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Soluble	Solid	DI Leach	
890-5264-2	BH23-09	Soluble	Solid	DI Leach	
890-5264-3	BH23-10	Soluble	Solid	DI Leach	
890-5264-4	BH23-10	Soluble	Solid	DI Leach	
890-5264-5	BH23-11	Soluble	Solid	DI Leach	
890-5264-6	BH23-06	Soluble	Solid	DI Leach	
890-5264-7	BH23-06	Soluble	Solid	DI Leach	
890-5264-8	BH23-07	Soluble	Solid	DI Leach	
890-5264-9	BH23-07	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

HPLC/IC (Continued)

Leach Batch: 62612 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-10	BH23-07	Soluble	Solid	DI Leach	
890-5264-11	BH23-08	Soluble	Solid	DI Leach	
890-5264-12	BH23-08	Soluble	Solid	DI Leach	
MB 880-62612/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62612/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62612/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5264-3 MS	BH23-10	Soluble	Solid	DI Leach	
890-5264-3 MSD	BH23-10	Soluble	Solid	DI Leach	

Analysis Batch: 62734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5264-1	BH23-09	Soluble	Solid	300.0	62612
890-5264-2	BH23-09	Soluble	Solid	300.0	62612
890-5264-3	BH23-10	Soluble	Solid	300.0	62612
890-5264-4	BH23-10	Soluble	Solid	300.0	62612
890-5264-5	BH23-11	Soluble	Solid	300.0	62612
890-5264-6	BH23-06	Soluble	Solid	300.0	62612
890-5264-7	BH23-06	Soluble	Solid	300.0	62612
890-5264-8	BH23-07	Soluble	Solid	300.0	62612
890-5264-9	BH23-07	Soluble	Solid	300.0	62612
890-5264-10	BH23-07	Soluble	Solid	300.0	62612
890-5264-11	BH23-08	Soluble	Solid	300.0	62612
890-5264-12	BH23-08	Soluble	Solid	300.0	62612
MB 880-62612/1-A	Method Blank	Soluble	Solid	300.0	62612
LCS 880-62612/2-A	Lab Control Sample	Soluble	Solid	300.0	62612
LCSD 880-62612/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62612
890-5264-3 MS	BH23-10	Soluble	Solid	300.0	62612
890-5264-3 MSD	BH23-10	Soluble	Solid	300.0	62612

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-09
Date Collected: 09/12/23 12:45
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 10:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 10:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/15/23 23:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		50			62734	09/17/23 22:17	CH	EET MID

Client Sample ID: BH23-09
Date Collected: 09/12/23 13:15
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 11:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 11:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 00:09	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		20			62734	09/17/23 22:24	CH	EET MID

Client Sample ID: BH23-10
Date Collected: 09/12/23 14:00
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 11:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 11:51	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 00:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 22:30	CH	EET MID

Client Sample ID: BH23-10
Date Collected: 09/12/23 14:15
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 12:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 12:17	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 00:52	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-10
Date Collected: 09/12/23 14:15
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 22:50	CH	EET MID

Client Sample ID: BH23-11
Date Collected: 09/12/23 14:30
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 12:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 12:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 01:14	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		50			62734	09/17/23 22:57	CH	EET MID

Client Sample ID: BH23-06
Date Collected: 09/11/23 11:34
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 13:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 01:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 23:17	CH	EET MID

Client Sample ID: BH23-06
Date Collected: 09/11/23 15:05
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 13:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 13:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 01:58	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 23:24	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-07
Date Collected: 09/11/23 12:12
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 14:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 14:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 02:20	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 23:30	CH	EET MID

Client Sample ID: BH23-07
Date Collected: 09/11/23 12:22
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-9
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			4.97 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 14:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 14:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	62583	09/15/23 12:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62511	09/16/23 02:42	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		10			62734	09/17/23 23:37	CH	EET MID

Client Sample ID: BH23-07
Date Collected: 09/11/23 12:37
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62590	09/15/23 13:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62804	09/20/23 14:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/20/23 14:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	62618	09/15/23 17:54	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62664	09/19/23 00:23	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		10			62734	09/17/23 23:44	CH	EET MID

Client Sample ID: BH23-08
Date Collected: 09/11/23 13:01
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	62599	09/18/23 08:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62672	09/19/23 05:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/19/23 05:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	62618	09/15/23 17:54	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62666	09/18/23 20:03	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Client Sample ID: BH23-08
Date Collected: 09/11/23 13:01
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 23:50	CH	EET MID

Client Sample ID: BH23-08
Date Collected: 09/11/23 13:10
Date Received: 09/13/23 09:42

Lab Sample ID: 890-5264-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62599	09/18/23 08:54	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62672	09/19/23 05:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62802	09/19/23 05:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62618	09/15/23 17:54	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62666	09/18/23 20:25	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62612	09/15/23 16:39	SMC	EET MID
Soluble	Analysis	300.0		1			62734	09/17/23 23:57	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water

Job ID: 890-5264-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5264-1	BH23-09	Solid	09/12/23 12:45	09/13/23 09:42	0
890-5264-2	BH23-09	Solid	09/12/23 13:15	09/13/23 09:42	1
890-5264-3	BH23-10	Solid	09/12/23 14:00	09/13/23 09:42	0
890-5264-4	BH23-10	Solid	09/12/23 14:15	09/13/23 09:42	2
890-5264-5	BH23-11	Solid	09/12/23 14:30	09/13/23 09:42	0
890-5264-6	BH23-06	Solid	09/11/23 11:34	09/13/23 09:42	0
890-5264-7	BH23-06	Solid	09/11/23 15:05	09/13/23 09:42	2
890-5264-8	BH23-07	Solid	09/11/23 12:12	09/13/23 09:42	0
890-5264-9	BH23-07	Solid	09/11/23 12:22	09/13/23 09:42	2
890-5264-10	BH23-07	Solid	09/11/23 12:37	09/13/23 09:42	3
890-5264-11	BH23-08	Solid	09/11/23 13:01	09/13/23 09:42	0
890-5264-12	BH23-08	Solid	09/11/23 13:10	09/13/23 09:42	2

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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: _____

www.xenco.com Page 1 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	-	City, State ZIP:	/
Phone:	-	Email:	cdixon@vertex.ca

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:	Mobley Water	Turn Around	☒ Routine ☐ Rush
Project Number:	23E-04909	Due Date:	9/20/23
Project Location:	Mobley	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	A. Mohle		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TM4	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	12.0	
Total Containers:		Corrected Temperature:	11.8	

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	Parameters: BTEX (8021)	TPH (8015)	Cl	Sample Comments
BH23-09	Soil	9/12/23	12:45	0'						
BH23-09			13:15	1'						
BH23-10			14:00	0'						
BH23-10			14:15	2'						
BH23-11			14:30	0'						
BH23-06		9.11.23	11:34	0'						
BH23-06			11:55	2'						
BH23-07			12:12	0'						
BH23-07			12:22	2'						
BH23-08			12:38	3'						

890-5264 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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/13/23 9:42	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc: dcosta filho@vertex.ca

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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: _____

www.xenco.com Page 2 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	—	City, State ZIP:	
Phone:	—	Email:	cdixon@vertex.ca

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:	Motley Water 2	Turn Around	
Project Number:	23E-04909	☑ Routine ☐ Rush	
Project Location:	Mobbs	Due Date:	9.20.23
Sampler's Name:	A. McKie	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:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

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 (8021)	TPH (8015)	Cl	Sample Comments
BH23-08	Soil	9.11.23	13:01	0'	grab						
BH23-08	↓	↓	13:10	2'							

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

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

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1 AM		9/13/23 10:45	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Please cc dcostafilho@vertex.ca

9/20/2023

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5264-1
SDG Number: 23E-04909

Login Number: 5264
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5264-1
SDG Number: 23E-04909

Login Number: 5264
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 09/15/23 11:13 AM

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.	True	
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").	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 9/21/2023 10:33:49 AM

JOB DESCRIPTION

Mobley Water Recycling 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5282-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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my EOL

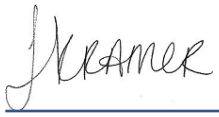
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/21/2023 10:33:49 AM

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

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 22
QC Sample Results 24
QC Association Summary 30
Lab Chronicle 35
Certification Summary 41
Method Summary 42
Sample Summary 43
Chain of Custody 44
Receipt Checklists 46

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Definitions/Glossary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Job ID: 890-5282-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5282-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/18/2023 9:31 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-11 2' (890-5282-1), BH23-11 4' (890-5282-2), BH23-12 0' (890-5282-3), BH23-12 2' (890-5282-4), BH23-12 4' (890-5282-5), BH23-13 0' (890-5282-6), BH23-13 2' (890-5282-7), BH23-14 0' (890-5282-8), BH23-14 2' (890-5282-9), BH23-15 0' (890-5282-10), BH23-15 2' (890-5282-11), BH23-16 0' (890-5282-12), BH23-16 4' (890-5282-13), BH23-18 0' (890-5282-14), BH23-18 2' (890-5282-15), BH23-19 0' (890-5282-16), BH23-20 0' (890-5282-17) and BH23-20 2' (890-5282-18).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-62868 recovered under the lower control limit for Ethylbenzene, Toluene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.(CCV 880-62868/33)

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-62868/33). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-62810 and analytical batch 880-62773 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-33337-A-1-E), (880-33337-A-1-F MS) and (880-33337-A-1-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-62773/20), (CCV 880-62773/31), (CCV 880-62773/5) and (LCS 880-62810/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-11 2' (890-5282-1), BH23-11 4' (890-5282-2), BH23-12 0' (890-5282-3), BH23-12 2' (890-5282-4) and BH23-12 4' (890-5282-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-14 0' (890-5282-8), BH23-14 2' (890-5282-9), BH23-15 0' (890-5282-10), BH23-15 2' (890-5282-11), BH23-16 0' (890-5282-12), BH23-16 4' (890-5282-13), BH23-18 0' (890-5282-14), BH23-18 2' (890-5282-15), BH23-19 0' (890-5282-16), BH23-20 0' (890-5282-17), (890-5282-A-8-D MS) and

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Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Job ID: 890-5282-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

(890-5282-A-8-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH23-20 2' (890-5282-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62809 and analytical batch 880-62854 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-62808 and analytical batch 880-62873 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Released to Imaging: 3/12/2025 9:46:11 AM

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-11 2'

Lab Sample ID: 890-5282-1
Matrix: Solid
Date Collected: 09/14/23 10:58
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 12:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 12:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 12:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 12:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 12:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:02*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 12:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/19/23 19:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/19/23 11:55	09/19/23 19:10	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/19/23 11:55	09/19/23 19:10	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/19/23 11:55	09/19/23 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*09/19/23 11:55*	*09/19/23 19:10*	*1*
o-Terphenyl	*128*		*70 - 130*	*09/19/23 11:55*	*09/19/23 19:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**128**		5.02		mg/Kg			09/19/23 18:15	1

Client Sample ID: BH23-11 4'

Lab Sample ID: 890-5282-2
Matrix: Solid
Date Collected: 09/14/23 11:20
Date Received: 09/18/23 09:31
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 12:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 12:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:22*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-11 4'

Lab Sample ID: 890-5282-2
Matrix: Solid
Date Collected: 09/14/23 11:20
Date Received: 09/18/23 09:31
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 12:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/19/23 19:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:32	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:32	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*09/19/23 11:55*	*09/19/23 19:32*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/19/23 11:55*	*09/19/23 19:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**645**		25.2		mg/Kg			09/19/23 18:21	5

Client Sample ID: BH23-12 0'

Lab Sample ID: 890-5282-3
Matrix: Solid
Date Collected: 09/14/23 10:01
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 12:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 12:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:43*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/19/23 12:26*	*09/20/23 12:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 12:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/19/23 19:54	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-12 0'

Lab Sample ID: 890-5282-3
Matrix: Solid
Date Collected: 09/14/23 10:01
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:54	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:54	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*09/19/23 11:55*	*09/19/23 19:54*	*1*
o-Terphenyl	*120*		*70 - 130*	*09/19/23 11:55*	*09/19/23 19:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8050**	**F1**	99.2		mg/Kg			09/19/23 18:27	20

Client Sample ID: BH23-12 2'

Lab Sample ID: 890-5282-4
Matrix: Solid
Date Collected: 09/14/23 10:09
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 13:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 13:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:03*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/20/23 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/19/23 20:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 20:16	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 20:16	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/19/23 11:55	09/19/23 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*09/19/23 11:55*	*09/19/23 20:16*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/19/23 11:55*	*09/19/23 20:16*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-12 2'

Lab Sample ID: 890-5282-4
Matrix: Solid
Date Collected: 09/14/23 10:09
Date Received: 09/18/23 09:31
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1580		50.5		mg/Kg			09/19/23 18:44	10

Client Sample ID: BH23-12 4'

Lab Sample ID: 890-5282-5
Matrix: Solid
Date Collected: 09/14/23 10:15
Date Received: 09/18/23 09:31
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 13:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 13:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 13:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 13:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 13:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 13:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/19/23 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/19/23 11:55	09/19/23 20:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/19/23 11:55	09/19/23 20:38	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/19/23 11:55	09/19/23 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*09/19/23 11:55*	*09/19/23 20:38*	*1*
o-Terphenyl	*119*		*70 - 130*	*09/19/23 11:55*	*09/19/23 20:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1130		50.3		mg/Kg			09/19/23 18:50	10

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-13 0'

Lab Sample ID: 890-5282-6
Matrix: Solid
Date Collected: 09/14/23 10:30
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 13:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 13:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:44*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/19/23 12:26*	*09/20/23 13:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/20/23 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/19/23 21:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/19/23 11:55	09/19/23 21:01	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/19/23 11:55	09/19/23 21:01	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/19/23 11:55	09/19/23 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*09/19/23 11:55*	*09/19/23 21:01*	*1*
o-Terphenyl	*112*		*70 - 130*	*09/19/23 11:55*	*09/19/23 21:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**159**		25.2		mg/Kg			09/19/23 19:07	5

Client Sample ID: BH23-13 2'

Lab Sample ID: 890-5282-7
Matrix: Solid
Date Collected: 09/14/23 10:35
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 14:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 14:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:05*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-13 2'

Lab Sample ID: 890-5282-7
Matrix: Solid
Date Collected: 09/14/23 10:35
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/19/23 21:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/19/23 11:55	09/19/23 21:24	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/19/23 11:55	09/19/23 21:24	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/19/23 11:55	09/19/23 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*09/19/23 11:55*	*09/19/23 21:24*	*1*
o-Terphenyl	*113*		*70 - 130*	*09/19/23 11:55*	*09/19/23 21:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**158**		24.9		mg/Kg			09/19/23 19:13	5

Client Sample ID: BH23-14 0'

Lab Sample ID: 890-5282-8
Matrix: Solid
Date Collected: 09/14/23 10:45
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/19/23 12:26	09/20/23 14:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/19/23 12:26	09/20/23 14:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/19/23 12:26	09/20/23 14:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/19/23 12:26	09/20/23 14:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/19/23 12:26	09/20/23 14:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/19/23 12:26	09/20/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:25*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/20/23 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**57.6**		49.6		mg/Kg			09/19/23 13:19	1

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-14 0'

Lab Sample ID: 890-5282-8
Matrix: Solid
Date Collected: 09/14/23 10:45
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/19/23 12:28	09/19/23 13:19	1
Diesel Range Organics (Over C10-C28)	**57.6**		49.6		mg/Kg		09/19/23 12:28	09/19/23 13:19	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/19/23 12:28	09/19/23 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 13:19*	*1*
o-Terphenyl	*160*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 13:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9150**		99.0		mg/Kg			09/19/23 19:19	20

Client Sample ID: BH23-14 2'

Lab Sample ID: 890-5282-9
Matrix: Solid
Date Collected: 09/14/23 10:52
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 14:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 14:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:46*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/19/23 12:26*	*09/20/23 14:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/19/23 14:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 14:24	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 14:24	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*09/19/23 12:28*	*09/19/23 14:24*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 14:24*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-14 2'

Lab Sample ID: 890-5282-9
Matrix: Solid
Date Collected: 09/14/23 10:52
Date Received: 09/18/23 09:31
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3830		49.8		mg/Kg			09/19/23 19:25	10

Client Sample ID: BH23-15 0'

Lab Sample ID: 890-5282-10
Matrix: Solid
Date Collected: 09/14/23 11:02
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 15:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 15:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 15:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 15:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 15:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*09/19/23 12:26*	*09/20/23 15:06*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/19/23 12:26*	*09/20/23 15:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/20/23 15:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/19/23 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 14:46	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 14:46	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 14:46*	*1*
o-Terphenyl	*167*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 14:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1410		49.6		mg/Kg			09/19/23 19:31	10

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-15 2'

Lab Sample ID: 890-5282-11
Matrix: Solid
Date Collected: 09/15/23 11:21
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 16:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 16:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 16:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 16:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 16:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*09/19/23 12:26*	*09/20/23 16:57*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/19/23 12:26*	*09/20/23 16:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/19/23 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 15:08	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 15:08	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*146*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:08*	*1*
o-Terphenyl	*169*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.04		mg/Kg			09/19/23 19:37	1

Client Sample ID: BH23-16 0'

Lab Sample ID: 890-5282-12
Matrix: Solid
Date Collected: 09/15/23 11:34
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 17:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 17:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 17:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 17:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 17:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:18*	*1*

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-16 0'

Lab Sample ID: 890-5282-12
Matrix: Solid
Date Collected: 09/15/23 11:34
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/20/23 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/19/23 15:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/19/23 12:28	09/19/23 15:30	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/19/23 12:28	09/19/23 15:30	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/19/23 12:28	09/19/23 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:30*	*1*
o-Terphenyl	*178*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.6**		5.02		mg/Kg			09/19/23 19:42	1

Client Sample ID: BH23-16 4'

Lab Sample ID: 890-5282-13
Matrix: Solid
Date Collected: 09/15/23 11:51
Date Received: 09/18/23 09:31
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/19/23 12:26	09/20/23 17:38	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/19/23 12:26	09/20/23 17:38	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/19/23 12:26	09/20/23 17:38	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/19/23 12:26	09/20/23 17:38	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/19/23 12:26	09/20/23 17:38	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/19/23 12:26	09/20/23 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:38*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/20/23 17:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/23 15:52	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-16 4'

Lab Sample ID: 890-5282-13
Matrix: Solid
Date Collected: 09/15/23 11:51
Date Received: 09/18/23 09:31
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 15:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 15:52	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*150*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:52*	*1*
o-Terphenyl	*169*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 15:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**94.2**		4.96		mg/Kg			09/19/23 20:53	1

Client Sample ID: BH23-18 0'

Lab Sample ID: 890-5282-14
Matrix: Solid
Date Collected: 09/15/23 10:32
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 17:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 17:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 17:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 17:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/19/23 12:26	09/20/23 17:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/19/23 12:26	09/20/23 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:58*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*09/19/23 12:26*	*09/20/23 17:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/20/23 17:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/23 16:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 16:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 16:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/19/23 12:28	09/19/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 16:14*	*1*
o-Terphenyl	*164*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 16:14*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-18 0'

Lab Sample ID: 890-5282-14
Matrix: Solid
Date Collected: 09/15/23 10:32
Date Received: 09/18/23 09:31
Sample Depth: 0

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.6		5.04		mg/Kg			09/19/23 20:59	1

Client Sample ID: BH23-18 2'

Lab Sample ID: 890-5282-15
Matrix: Solid
Date Collected: 09/15/23 10:45
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 18:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 18:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 18:19	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 18:19	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/19/23 12:26	09/20/23 18:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*09/19/23 12:26*	*09/20/23 18:19*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 18:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/20/23 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/19/23 16:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/19/23 12:28	09/19/23 16:36	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/19/23 12:28	09/19/23 16:36	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/19/23 12:28	09/19/23 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*09/19/23 12:28*	*09/19/23 16:36*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 16:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		5.00		mg/Kg			09/19/23 21:04	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-19 0'

Date Collected: 09/15/23 12:30
Date Received: 09/18/23 09:31
Sample Depth: 0

Lab Sample ID: 890-5282-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 18:39	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 18:39	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 18:39	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 18:39	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 18:39	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/19/23 12:26*	*09/20/23 18:39*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*09/19/23 12:26*	*09/20/23 18:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/19/23 16:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 16:58	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 16:58	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/19/23 12:28	09/19/23 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*154*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 16:58*	*1*
o-Terphenyl	*178*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 16:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2640**		49.7		mg/Kg			09/19/23 21:22	10

Client Sample ID: BH23-20 0'

Date Collected: 09/15/23 12:35
Date Received: 09/18/23 09:31
Sample Depth: 0

Lab Sample ID: 890-5282-17
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 19:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 19:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 19:00	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 19:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/19/23 12:26	09/20/23 19:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*09/19/23 12:26*	*09/20/23 19:00*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-20 0'

Lab Sample ID: 890-5282-17
Matrix: Solid
Date Collected: 09/15/23 12:35
Date Received: 09/18/23 09:31
Sample Depth: 0

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*09/19/23 12:26*	*09/20/23 19:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/20/23 19:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/19/23 17:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 17:20	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 17:20	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/19/23 12:28	09/19/23 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 17:20*	*1*
o-Terphenyl	*168*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 17:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**58.5**		4.99		mg/Kg			09/19/23 21:28	1

Client Sample ID: BH23-20 2'

Lab Sample ID: 890-5282-18
Matrix: Solid
Date Collected: 09/15/23 12:40
Date Received: 09/18/23 09:31
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 19:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 19:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 19:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 19:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/19/23 12:26	09/20/23 19:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/19/23 12:26	09/20/23 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/19/23 12:26*	*09/20/23 19:20*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/19/23 12:26*	*09/20/23 19:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/20/23 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/19/23 18:04	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-20 2'

Date Collected: 09/15/23 12:40
Date Received: 09/18/23 09:31
Sample Depth: 2

Lab Sample ID: 890-5282-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 18:04	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 18:04	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/19/23 12:28	09/19/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 18:04*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*09/19/23 12:28*	*09/19/23 18:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.7**		5.01		mg/Kg			09/19/23 21:34	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
890-5282-1	BH23-11 2'	86	103										
890-5282-1 MS	BH23-11 2'	102	103										
890-5282-1 MSD	BH23-11 2'	102	107										
890-5282-2	BH23-11 4'	92	104										
890-5282-3	BH23-12 0'	94	101										
890-5282-4	BH23-12 2'	103	107										
890-5282-5	BH23-12 4'	103	102										
890-5282-6	BH23-13 0'	100	109										
890-5282-7	BH23-13 2'	102	102										
890-5282-8	BH23-14 0'	105	104										
890-5282-9	BH23-14 2'	95	107										
890-5282-10	BH23-15 0'	101	110										
890-5282-11	BH23-15 2'	83	98										
890-5282-12	BH23-16 0'	87	108										
890-5282-13	BH23-16 4'	103	116										
890-5282-14	BH23-18 0'	102	106										
890-5282-15	BH23-18 2'	106	103										
890-5282-16	BH23-19 0'	103	113										
890-5282-17	BH23-20 0'	94	107										
890-5282-18	BH23-20 2'	95	110										
LCS 880-62822/1-A	Lab Control Sample	92	94										
LCSD 880-62822/2-A	Lab Control Sample Dup	108	98										
MB 880-62822/5-A	Method Blank	114	121										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-33337-A-1-F MS	Matrix Spike	141 S1+	117										
880-33337-A-1-G MSD	Matrix Spike Duplicate	137 S1+	113										
890-5282-1	BH23-11 2'	147 S1+	128										
890-5282-2	BH23-11 4'	151 S1+	125										
890-5282-3	BH23-12 0'	137 S1+	120										
890-5282-4	BH23-12 2'	140 S1+	123										
890-5282-5	BH23-12 4'	136 S1+	119										
890-5282-6	BH23-13 0'	130	112										
890-5282-7	BH23-13 2'	128	113										
890-5282-8	BH23-14 0'	140 S1+	160 S1+										
890-5282-8 MS	BH23-14 0'	137 S1+	140 S1+										
890-5282-8 MSD	BH23-14 0'	140 S1+	142 S1+										
890-5282-9	BH23-14 2'	124	139 S1+										
890-5282-10	BH23-15 0'	145 S1+	167 S1+										
890-5282-11	BH23-15 2'	146 S1+	169 S1+										
890-5282-12	BH23-16 0'	155 S1+	178 S1+										

Surrogate Summary

Client: Vertex Job ID: 890-5282-1
Project/Site: Mobley Water Recycling 2 SDG: 23E-04909

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-5282-13	BH23-16 4'	150 S1+	169 S1+								
890-5282-14	BH23-18 0'	141 S1+	164 S1+								
890-5282-15	BH23-18 2'	125	139 S1+								
890-5282-16	BH23-19 0'	154 S1+	178 S1+								
890-5282-17	BH23-20 0'	145 S1+	168 S1+								
890-5282-18	BH23-20 2'	131 S1+	150 S1+								
LCS 880-62810/2-A	Lab Control Sample	119	138 S1+								
LCS 880-62823/2-A	Lab Control Sample	101	115								
LCSD 880-62810/3-A	Lab Control Sample Dup	107	103								
LCSD 880-62823/3-A	Lab Control Sample Dup	93	106								
MB 880-62810/1-A	Method Blank	161 S1+	148 S1+								
MB 880-62823/1-A	Method Blank	77	88								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-62822/5-A
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/19/23 12:26	09/20/23 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/19/23 12:26	09/20/23 11:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/19/23 12:26	09/20/23 11:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*09/19/23 12:26*	*09/20/23 11:33*	*1*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*	*09/19/23 12:26*	*09/20/23 11:33*	*1*

Lab Sample ID: LCS 880-62822/1-A
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09436		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.08600		mg/Kg		86	70 - 130
Toluene	0.100	0.09252		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1820		mg/Kg		91	70 - 130
o-Xylene	0.100	0.08241		mg/Kg		82	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-62822/2-A
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62822

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1076		mg/Kg		108	70 - 130	13	35
Ethylbenzene	0.100	0.09914		mg/Kg		99	70 - 130	14	35
Toluene	0.100	0.09281		mg/Kg		93	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2154		mg/Kg		108	70 - 130	17	35
o-Xylene	0.100	0.09994		mg/Kg		100	70 - 130	19	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-5282-1 MS
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: BH23-11 2'
Prep Type: Total/NA
Prep Batch: 62822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0998	0.1011		mg/Kg		101	70 - 130
Ethylbenzene	<0.00201	U	0.0998	0.07921		mg/Kg		79	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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

Lab Sample ID: 890-5282-1 MS
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: BH23-11 2'
Prep Type: Total/NA
Prep Batch: 62822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00201	U	0.0998	0.08311		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1675		mg/Kg		84	70 - 130
o-Xylene	<0.00201	U	0.0998	0.07739		mg/Kg		78	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-5282-1 MSD
Matrix: Solid
Analysis Batch: 62868

Client Sample ID: BH23-11 2'
Prep Type: Total/NA
Prep Batch: 62822

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.1151		mg/Kg		116	70 - 130	13	35
Ethylbenzene	<0.00201	U	0.0990	0.08583		mg/Kg		87	70 - 130	8	35
Toluene	<0.00201	U	0.0990	0.09316		mg/Kg		94	70 - 130	11	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1797		mg/Kg		91	70 - 130	7	35
o-Xylene	<0.00201	U	0.0990	0.09019		mg/Kg		91	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-62810/1-A
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*161*	*S1+*	*70 - 130*	*09/19/23 08:00*	*09/19/23 08:41*	*1*
o-Terphenyl	*148*	*S1+*	*70 - 130*	*09/19/23 08:00*	*09/19/23 08:41*	*1*

Lab Sample ID: LCS 880-62810/2-A
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	927.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	966.8		mg/Kg		97	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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

Lab Sample ID: LCS 880-62810/2-A
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62810

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	138	S1+	70 - 130

Lab Sample ID: LCSD 880-62810/3-A
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62810

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	967.3		mg/Kg		97	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	942.5		mg/Kg		94	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 880-33337-A-1-F MS
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	991.9		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1234		mg/Kg		118	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	141	S1+	70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: 880-33337-A-1-G MSD
Matrix: Solid
Analysis Batch: 62773

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 62810

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	939.5		mg/Kg		90	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1198		mg/Kg		115	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	113		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62823/1-A
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62823

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/19/23 08:00	09/19/23 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/19/23 08:00*	*09/19/23 08:41*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/19/23 08:00*	*09/19/23 08:41*	*1*

Lab Sample ID: LCS 880-62823/2-A
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62823

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	918.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	991.0		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Lab Sample ID: LCSD 880-62823/3-A
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62823

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	934.1		mg/Kg		93	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	914.9		mg/Kg		91	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: 890-5282-8 MS
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: BH23-14 0'
Prep Type: Total/NA
Prep Batch: 62823

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	997	910.8		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	57.6		997	1124		mg/Kg		107	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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

Lab Sample ID: 890-5282-8 MS
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: BH23-14 0'
Prep Type: Total/NA
Prep Batch: 62823

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*137*	*S1+*	*70 - 130*
o-Terphenyl	*140*	*S1+*	*70 - 130*

Lab Sample ID: 890-5282-8 MSD
Matrix: Solid
Analysis Batch: 62775

Client Sample ID: BH23-14 0'
Prep Type: Total/NA
Prep Batch: 62823

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	997	948.4		mg/Kg		91	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	57.6		997	1137		mg/Kg		108	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*140*	*S1+*	*70 - 130*
o-Terphenyl	*142*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62809/1-A
Matrix: Solid
Analysis Batch: 62854

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		mg/Kg			09/19/23 16:47	1

Lab Sample ID: LCS 880-62809/2-A
Matrix: Solid
Analysis Batch: 62854

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.4		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-62809/3-A
Matrix: Solid
Analysis Batch: 62854

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	245.3		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-5282-3 MS
Matrix: Solid
Analysis Batch: 62854

Client Sample ID: BH23-12 0'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8050	F1	4960	12450	F1	mg/Kg		89	90 - 110		

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5282-3 MSD — **Client Sample ID: BH23-12 0'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62854

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8050	F1	4960	12430	F1	mg/Kg		88	90 - 110	0	20

Lab Sample ID: MB 880-62808/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/19/23 20:12	1

Lab Sample ID: LCS 880-62808/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248.5		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-62808/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	248.2		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-33386-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	104		251	345.0		mg/Kg		96	90 - 110

Lab Sample ID: 880-33386-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104		251	345.5		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-33434-A-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4550	F1	2480	6444	F1	mg/Kg		76	90 - 110

Lab Sample ID: 880-33434-A-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 62873

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4550	F1	2480	6443	F1	mg/Kg		76	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

GC VOA

Prep Batch: 62822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	5035	
890-5282-2	BH23-11 4'	Total/NA	Solid	5035	
890-5282-3	BH23-12 0'	Total/NA	Solid	5035	
890-5282-4	BH23-12 2'	Total/NA	Solid	5035	
890-5282-5	BH23-12 4'	Total/NA	Solid	5035	
890-5282-6	BH23-13 0'	Total/NA	Solid	5035	
890-5282-7	BH23-13 2'	Total/NA	Solid	5035	
890-5282-8	BH23-14 0'	Total/NA	Solid	5035	
890-5282-9	BH23-14 2'	Total/NA	Solid	5035	
890-5282-10	BH23-15 0'	Total/NA	Solid	5035	
890-5282-11	BH23-15 2'	Total/NA	Solid	5035	
890-5282-12	BH23-16 0'	Total/NA	Solid	5035	
890-5282-13	BH23-16 4'	Total/NA	Solid	5035	
890-5282-14	BH23-18 0'	Total/NA	Solid	5035	
890-5282-15	BH23-18 2'	Total/NA	Solid	5035	
890-5282-16	BH23-19 0'	Total/NA	Solid	5035	
890-5282-17	BH23-20 0'	Total/NA	Solid	5035	
890-5282-18	BH23-20 2'	Total/NA	Solid	5035	
MB 880-62822/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-62822/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-62822/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5282-1 MS	BH23-11 2'	Total/NA	Solid	5035	
890-5282-1 MSD	BH23-11 2'	Total/NA	Solid	5035	

Analysis Batch: 62868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	8021B	62822
890-5282-2	BH23-11 4'	Total/NA	Solid	8021B	62822
890-5282-3	BH23-12 0'	Total/NA	Solid	8021B	62822
890-5282-4	BH23-12 2'	Total/NA	Solid	8021B	62822
890-5282-5	BH23-12 4'	Total/NA	Solid	8021B	62822
890-5282-6	BH23-13 0'	Total/NA	Solid	8021B	62822
890-5282-7	BH23-13 2'	Total/NA	Solid	8021B	62822
890-5282-8	BH23-14 0'	Total/NA	Solid	8021B	62822
890-5282-9	BH23-14 2'	Total/NA	Solid	8021B	62822
890-5282-10	BH23-15 0'	Total/NA	Solid	8021B	62822
890-5282-11	BH23-15 2'	Total/NA	Solid	8021B	62822
890-5282-12	BH23-16 0'	Total/NA	Solid	8021B	62822
890-5282-13	BH23-16 4'	Total/NA	Solid	8021B	62822
890-5282-14	BH23-18 0'	Total/NA	Solid	8021B	62822
890-5282-15	BH23-18 2'	Total/NA	Solid	8021B	62822
890-5282-16	BH23-19 0'	Total/NA	Solid	8021B	62822
890-5282-17	BH23-20 0'	Total/NA	Solid	8021B	62822
890-5282-18	BH23-20 2'	Total/NA	Solid	8021B	62822
MB 880-62822/5-A	Method Blank	Total/NA	Solid	8021B	62822
LCS 880-62822/1-A	Lab Control Sample	Total/NA	Solid	8021B	62822
LCSD 880-62822/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	62822
890-5282-1 MS	BH23-11 2'	Total/NA	Solid	8021B	62822
890-5282-1 MSD	BH23-11 2'	Total/NA	Solid	8021B	62822

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

GC VOA

Analysis Batch: 62923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	Total BTEX	
890-5282-2	BH23-11 4'	Total/NA	Solid	Total BTEX	
890-5282-3	BH23-12 0'	Total/NA	Solid	Total BTEX	
890-5282-4	BH23-12 2'	Total/NA	Solid	Total BTEX	
890-5282-5	BH23-12 4'	Total/NA	Solid	Total BTEX	
890-5282-6	BH23-13 0'	Total/NA	Solid	Total BTEX	
890-5282-7	BH23-13 2'	Total/NA	Solid	Total BTEX	
890-5282-8	BH23-14 0'	Total/NA	Solid	Total BTEX	
890-5282-9	BH23-14 2'	Total/NA	Solid	Total BTEX	
890-5282-10	BH23-15 0'	Total/NA	Solid	Total BTEX	
890-5282-11	BH23-15 2'	Total/NA	Solid	Total BTEX	
890-5282-12	BH23-16 0'	Total/NA	Solid	Total BTEX	
890-5282-13	BH23-16 4'	Total/NA	Solid	Total BTEX	
890-5282-14	BH23-18 0'	Total/NA	Solid	Total BTEX	
890-5282-15	BH23-18 2'	Total/NA	Solid	Total BTEX	
890-5282-16	BH23-19 0'	Total/NA	Solid	Total BTEX	
890-5282-17	BH23-20 0'	Total/NA	Solid	Total BTEX	
890-5282-18	BH23-20 2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 62773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	8015B NM	62810
890-5282-2	BH23-11 4'	Total/NA	Solid	8015B NM	62810
890-5282-3	BH23-12 0'	Total/NA	Solid	8015B NM	62810
890-5282-4	BH23-12 2'	Total/NA	Solid	8015B NM	62810
890-5282-5	BH23-12 4'	Total/NA	Solid	8015B NM	62810
890-5282-6	BH23-13 0'	Total/NA	Solid	8015B NM	62810
890-5282-7	BH23-13 2'	Total/NA	Solid	8015B NM	62810
MB 880-62810/1-A	Method Blank	Total/NA	Solid	8015B NM	62810
LCS 880-62810/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62810
LCSD 880-62810/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62810
880-33337-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	62810
880-33337-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62810

Analysis Batch: 62775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-8	BH23-14 0'	Total/NA	Solid	8015B NM	62823
890-5282-9	BH23-14 2'	Total/NA	Solid	8015B NM	62823
890-5282-10	BH23-15 0'	Total/NA	Solid	8015B NM	62823
890-5282-11	BH23-15 2'	Total/NA	Solid	8015B NM	62823
890-5282-12	BH23-16 0'	Total/NA	Solid	8015B NM	62823
890-5282-13	BH23-16 4'	Total/NA	Solid	8015B NM	62823
890-5282-14	BH23-18 0'	Total/NA	Solid	8015B NM	62823
890-5282-15	BH23-18 2'	Total/NA	Solid	8015B NM	62823
890-5282-16	BH23-19 0'	Total/NA	Solid	8015B NM	62823
890-5282-17	BH23-20 0'	Total/NA	Solid	8015B NM	62823
890-5282-18	BH23-20 2'	Total/NA	Solid	8015B NM	62823
MB 880-62823/1-A	Method Blank	Total/NA	Solid	8015B NM	62823
LCS 880-62823/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62823

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

GC Semi VOA (Continued)

Analysis Batch: 62775 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-62823/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62823
890-5282-8 MS	BH23-14 0'	Total/NA	Solid	8015B NM	62823
890-5282-8 MSD	BH23-14 0'	Total/NA	Solid	8015B NM	62823

Prep Batch: 62810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	8015NM Prep	
890-5282-2	BH23-11 4'	Total/NA	Solid	8015NM Prep	
890-5282-3	BH23-12 0'	Total/NA	Solid	8015NM Prep	
890-5282-4	BH23-12 2'	Total/NA	Solid	8015NM Prep	
890-5282-5	BH23-12 4'	Total/NA	Solid	8015NM Prep	
890-5282-6	BH23-13 0'	Total/NA	Solid	8015NM Prep	
890-5282-7	BH23-13 2'	Total/NA	Solid	8015NM Prep	
MB 880-62810/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62810/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62810/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33337-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33337-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 62823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-8	BH23-14 0'	Total/NA	Solid	8015NM Prep	
890-5282-9	BH23-14 2'	Total/NA	Solid	8015NM Prep	
890-5282-10	BH23-15 0'	Total/NA	Solid	8015NM Prep	
890-5282-11	BH23-15 2'	Total/NA	Solid	8015NM Prep	
890-5282-12	BH23-16 0'	Total/NA	Solid	8015NM Prep	
890-5282-13	BH23-16 4'	Total/NA	Solid	8015NM Prep	
890-5282-14	BH23-18 0'	Total/NA	Solid	8015NM Prep	
890-5282-15	BH23-18 2'	Total/NA	Solid	8015NM Prep	
890-5282-16	BH23-19 0'	Total/NA	Solid	8015NM Prep	
890-5282-17	BH23-20 0'	Total/NA	Solid	8015NM Prep	
890-5282-18	BH23-20 2'	Total/NA	Solid	8015NM Prep	
MB 880-62823/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62823/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62823/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5282-8 MS	BH23-14 0'	Total/NA	Solid	8015NM Prep	
890-5282-8 MSD	BH23-14 0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 62889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Total/NA	Solid	8015 NM	
890-5282-2	BH23-11 4'	Total/NA	Solid	8015 NM	
890-5282-3	BH23-12 0'	Total/NA	Solid	8015 NM	
890-5282-4	BH23-12 2'	Total/NA	Solid	8015 NM	
890-5282-5	BH23-12 4'	Total/NA	Solid	8015 NM	
890-5282-6	BH23-13 0'	Total/NA	Solid	8015 NM	
890-5282-7	BH23-13 2'	Total/NA	Solid	8015 NM	
890-5282-8	BH23-14 0'	Total/NA	Solid	8015 NM	
890-5282-9	BH23-14 2'	Total/NA	Solid	8015 NM	
890-5282-10	BH23-15 0'	Total/NA	Solid	8015 NM	
890-5282-11	BH23-15 2'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

GC Semi VOA (Continued)

Analysis Batch: 62889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-12	BH23-16 0'	Total/NA	Solid	8015 NM	
890-5282-13	BH23-16 4'	Total/NA	Solid	8015 NM	
890-5282-14	BH23-18 0'	Total/NA	Solid	8015 NM	
890-5282-15	BH23-18 2'	Total/NA	Solid	8015 NM	
890-5282-16	BH23-19 0'	Total/NA	Solid	8015 NM	
890-5282-17	BH23-20 0'	Total/NA	Solid	8015 NM	
890-5282-18	BH23-20 2'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 62808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-13	BH23-16 4'	Soluble	Solid	DI Leach	
890-5282-14	BH23-18 0'	Soluble	Solid	DI Leach	
890-5282-15	BH23-18 2'	Soluble	Solid	DI Leach	
890-5282-16	BH23-19 0'	Soluble	Solid	DI Leach	
890-5282-17	BH23-20 0'	Soluble	Solid	DI Leach	
890-5282-18	BH23-20 2'	Soluble	Solid	DI Leach	
MB 880-62808/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62808/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62808/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33386-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33386-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-33434-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33434-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 62809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Soluble	Solid	DI Leach	
890-5282-2	BH23-11 4'	Soluble	Solid	DI Leach	
890-5282-3	BH23-12 0'	Soluble	Solid	DI Leach	
890-5282-4	BH23-12 2'	Soluble	Solid	DI Leach	
890-5282-5	BH23-12 4'	Soluble	Solid	DI Leach	
890-5282-6	BH23-13 0'	Soluble	Solid	DI Leach	
890-5282-7	BH23-13 2'	Soluble	Solid	DI Leach	
890-5282-8	BH23-14 0'	Soluble	Solid	DI Leach	
890-5282-9	BH23-14 2'	Soluble	Solid	DI Leach	
890-5282-10	BH23-15 0'	Soluble	Solid	DI Leach	
890-5282-11	BH23-15 2'	Soluble	Solid	DI Leach	
890-5282-12	BH23-16 0'	Soluble	Solid	DI Leach	
MB 880-62809/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62809/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62809/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5282-3 MS	BH23-12 0'	Soluble	Solid	DI Leach	
890-5282-3 MSD	BH23-12 0'	Soluble	Solid	DI Leach	

Analysis Batch: 62854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-1	BH23-11 2'	Soluble	Solid	300.0	62809
890-5282-2	BH23-11 4'	Soluble	Solid	300.0	62809
890-5282-3	BH23-12 0'	Soluble	Solid	300.0	62809

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

HPLC/IC (Continued)

Analysis Batch: 62854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-4	BH23-12 2'	Soluble	Solid	300.0	62809
890-5282-5	BH23-12 4'	Soluble	Solid	300.0	62809
890-5282-6	BH23-13 0'	Soluble	Solid	300.0	62809
890-5282-7	BH23-13 2'	Soluble	Solid	300.0	62809
890-5282-8	BH23-14 0'	Soluble	Solid	300.0	62809
890-5282-9	BH23-14 2'	Soluble	Solid	300.0	62809
890-5282-10	BH23-15 0'	Soluble	Solid	300.0	62809
890-5282-11	BH23-15 2'	Soluble	Solid	300.0	62809
890-5282-12	BH23-16 0'	Soluble	Solid	300.0	62809
MB 880-62809/1-A	Method Blank	Soluble	Solid	300.0	62809
LCS 880-62809/2-A	Lab Control Sample	Soluble	Solid	300.0	62809
LCSD 880-62809/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62809
890-5282-3 MS	BH23-12 0'	Soluble	Solid	300.0	62809
890-5282-3 MSD	BH23-12 0'	Soluble	Solid	300.0	62809

Analysis Batch: 62873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5282-13	BH23-16 4'	Soluble	Solid	300.0	62808
890-5282-14	BH23-18 0'	Soluble	Solid	300.0	62808
890-5282-15	BH23-18 2'	Soluble	Solid	300.0	62808
890-5282-16	BH23-19 0'	Soluble	Solid	300.0	62808
890-5282-17	BH23-20 0'	Soluble	Solid	300.0	62808
890-5282-18	BH23-20 2'	Soluble	Solid	300.0	62808
MB 880-62808/1-A	Method Blank	Soluble	Solid	300.0	62808
LCS 880-62808/2-A	Lab Control Sample	Soluble	Solid	300.0	62808
LCSD 880-62808/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62808
880-33386-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	62808
880-33386-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62808
880-33434-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	62808
880-33434-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62808

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-11 2'

Lab Sample ID: 890-5282-1
Matrix: Solid
Date Collected: 09/14/23 10:58
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 12:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 12:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 19:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 19:10	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62854	09/19/23 18:15	CH	EET MID

Client Sample ID: BH23-11 4'

Lab Sample ID: 890-5282-2
Matrix: Solid
Date Collected: 09/14/23 11:20
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 12:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 12:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 19:32	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 19:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	62854	09/19/23 18:21	CH	EET MID

Client Sample ID: BH23-12 0'

Lab Sample ID: 890-5282-3
Matrix: Solid
Date Collected: 09/14/23 10:01
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 12:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 12:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 19:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 19:54	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	62854	09/19/23 18:27	CH	EET MID

Client Sample ID: BH23-12 2'

Lab Sample ID: 890-5282-4
Matrix: Solid
Date Collected: 09/14/23 10:09
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 13:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 13:03	SM	EET MID

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Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-12 2'
Date Collected: 09/14/23 10:09
Date Received: 09/18/23 09:31

Lab Sample ID: 890-5282-4
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			62889	09/19/23 20:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 20:16	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	62854	09/19/23 18:44	CH	EET MID

Client Sample ID: BH23-12 4'
Date Collected: 09/14/23 10:15
Date Received: 09/18/23 09:31

Lab Sample ID: 890-5282-5
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			4.97 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 13:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 20:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 20:38	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	62854	09/19/23 18:50	CH	EET MID

Client Sample ID: BH23-13 0'
Date Collected: 09/14/23 10:30
Date Received: 09/18/23 09:31

Lab Sample ID: 890-5282-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 13:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 13:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 21:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 21:01	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	62854	09/19/23 19:07	CH	EET MID

Client Sample ID: BH23-13 2'
Date Collected: 09/14/23 10:35
Date Received: 09/18/23 09:31

Lab Sample ID: 890-5282-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 21:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	62810	09/19/23 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62773	09/19/23 21:24	SM	EET MID

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Released to Imaging: 3/12/2025 9:46:11 AM

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-13 2'

Lab Sample ID: 890-5282-7
Matrix: Solid
Date Collected: 09/14/23 10:35
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	62854	09/19/23 19:13	CH	EET MID

Client Sample ID: BH23-14 0'

Lab Sample ID: 890-5282-8
Matrix: Solid
Date Collected: 09/14/23 10:45
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 13:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 13:19	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	62854	09/19/23 19:19	CH	EET MID

Client Sample ID: BH23-14 2'

Lab Sample ID: 890-5282-9
Matrix: Solid
Date Collected: 09/14/23 10:52
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 14:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 14:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 14:24	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	62854	09/19/23 19:25	CH	EET MID

Client Sample ID: BH23-15 0'

Lab Sample ID: 890-5282-10
Matrix: Solid
Date Collected: 09/14/23 11:02
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 15:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 14:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 14:46	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	62854	09/19/23 19:31	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-15 2'

Lab Sample ID: 890-5282-11
Matrix: Solid
Date Collected: 09/15/23 11:21
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 16:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 16:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 15:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 15:08	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62854	09/19/23 19:37	CH	EET MID

Client Sample ID: BH23-16 0'

Lab Sample ID: 890-5282-12
Matrix: Solid
Date Collected: 09/15/23 11:34
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 17:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 17:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 15:30	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 15:30	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62809	09/19/23 11:36	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62854	09/19/23 19:42	CH	EET MID

Client Sample ID: BH23-16 4'

Lab Sample ID: 890-5282-13
Matrix: Solid
Date Collected: 09/15/23 11:51
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 17:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 17:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 15:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 15:52	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62873	09/19/23 20:53	CH	EET MID

Client Sample ID: BH23-18 0'

Lab Sample ID: 890-5282-14
Matrix: Solid
Date Collected: 09/15/23 10:32
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 17:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 17:58	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-18 0'

Lab Sample ID: 890-5282-14
Matrix: Solid
Date Collected: 09/15/23 10:32
Date Received: 09/18/23 09:31

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			62889	09/19/23 16:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 16:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62873	09/19/23 20:59	CH	EET MID

Client Sample ID: BH23-18 2'

Lab Sample ID: 890-5282-15
Matrix: Solid
Date Collected: 09/15/23 10:45
Date Received: 09/18/23 09:31

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	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 18:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 16:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 16:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62873	09/19/23 21:04	CH	EET MID

Client Sample ID: BH23-19 0'

Lab Sample ID: 890-5282-16
Matrix: Solid
Date Collected: 09/15/23 12:30
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 18:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 18:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 16:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 16:58	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	62873	09/19/23 21:22	CH	EET MID

Client Sample ID: BH23-20 0'

Lab Sample ID: 890-5282-17
Matrix: Solid
Date Collected: 09/15/23 12:35
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 17:20	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Client Sample ID: BH23-20 0'

Lab Sample ID: 890-5282-17
Matrix: Solid
Date Collected: 09/15/23 12:35
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62873	09/19/23 21:28	CH	EET MID

Client Sample ID: BH23-20 2'

Lab Sample ID: 890-5282-18
Matrix: Solid
Date Collected: 09/15/23 12:40
Date Received: 09/18/23 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	62822	09/19/23 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	62868	09/20/23 19:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			62923	09/20/23 19:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			62889	09/19/23 18:04	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	62823	09/19/23 12:28	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62775	09/19/23 18:04	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62808	09/19/23 11:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	62873	09/19/23 21:34	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5282-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5282-1	BH23-11 2'	Solid	09/14/23 10:58	09/18/23 09:31	2
890-5282-2	BH23-11 4'	Solid	09/14/23 11:20	09/18/23 09:31	4
890-5282-3	BH23-12 0'	Solid	09/14/23 10:01	09/18/23 09:31	0
890-5282-4	BH23-12 2'	Solid	09/14/23 10:09	09/18/23 09:31	2
890-5282-5	BH23-12 4'	Solid	09/14/23 10:15	09/18/23 09:31	4
890-5282-6	BH23-13 0'	Solid	09/14/23 10:30	09/18/23 09:31	0
890-5282-7	BH23-13 2'	Solid	09/14/23 10:35	09/18/23 09:31	2
890-5282-8	BH23-14 0'	Solid	09/14/23 10:45	09/18/23 09:31	0
890-5282-9	BH23-14 2'	Solid	09/14/23 10:52	09/18/23 09:31	2
890-5282-10	BH23-15 0'	Solid	09/14/23 11:02	09/18/23 09:31	0
890-5282-11	BH23-15 2'	Solid	09/15/23 11:21	09/18/23 09:31	2
890-5282-12	BH23-16 0'	Solid	09/15/23 11:34	09/18/23 09:31	0
890-5282-13	BH23-16 4'	Solid	09/15/23 11:51	09/18/23 09:31	4
890-5282-14	BH23-18 0'	Solid	09/15/23 10:32	09/18/23 09:31	0
890-5282-15	BH23-18 2'	Solid	09/15/23 10:45	09/18/23 09:31	2
890-5282-16	BH23-19 0'	Solid	09/15/23 12:30	09/18/23 09:31	0
890-5282-17	BH23-20 0'	Solid	09/15/23 12:35	09/18/23 09:31	0
890-5282-18	BH23-20 2'	Solid	09/15/23 12:40	09/18/23 09:31	2

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page 1 of 2

Project Manager:	Chance LDixon	Bill to: (if different)	Solaris - Rob Kurk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	236-04909	☑ Routine ☐ Rush	
Project Location:	Mobley	Due Date: 9.22.23	
Sampler's Name:	LDeusavan Costafilho	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#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

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

890-5282 Chain of Custody

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015	Cl	Sample Comments
BH23-11	2'	Soil	9.14.23	10:58	2'	Grab			X	X	X	
BH23-11	4'			11:20	4'							
BH23-12	0'			10:01	0'							
BH23-12	2'			10:09	2'							
BH23-12	4'			10:15	4'							
BH23-13	0'			10:30	0'							
BH23-13	2'			10:35	2'							
BH23-14	0'			10:45	0'							
BH23-14	2'			10:52	2'							
BH23-15	0'			11:02	0'							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9-18 9:39	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc ~~deusavan~~ dcostafilho@vertex.com

Released to Imaging: 3/12/2025 9:46:11 AM

Received by OCD: 7/31/2024 4:04:52 PM

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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: _____

www.xenco.com Page 2 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	On File	Address:	On File
City, State ZIP:		City, State ZIP:	
Phone:		Email:	cdixon@vertex.ca

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:	Mobil Water Recycle 2	Turn Around	☐ Routine ☐ Rush
Project Number:	23E-04609	Due Date:	
Project Location:	Mobley	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	DC		
PO #:			

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

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 8021	TPH 8015	Cl	Sample Comments
BH23-15 2'	SOIL	9/15/23	11:21	2'				✓	✓	✓	
BH23-16 0'			11:34	0'							
BH23-16 4'			11:51	4'							
BH23-18 0'			10:32	0'							
BH23-18 2'			10:45	2'							
BH23-19 0'			12:30	0'							
BH23-20 0'			12:35	0'							
BH23-20 2'			12:40	2'							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9-18 9:39	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5282-1
SDG Number: 23E-04909

Login Number: 5282
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5282-1
SDG Number: 23E-04909

Login Number: 5282
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/19/23 10:55 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 9/26/2023 11:34:07 AM

JOB DESCRIPTION

Mobley
SDG NUMBER 23E-04909

JOB NUMBER

890-5295-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 3/12/2025 9:46:11 AM

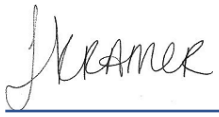
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
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Client: Vertex
Project/Site: Mobley

Laboratory Job ID: 890-5295-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 15
QC Sample Results 17
QC Association Summary 23
Lab Chronicle 27
Certification Summary 31
Method Summary 32
Sample Summary 33
Chain of Custody 34
Receipt Checklists 36

Definitions/Glossary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Job ID: 890-5295-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5295-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/19/2023 2:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.2°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-19 (890-5295-1), BH23-19 (890-5295-2), BH23-21 (890-5295-3), BH23-21 (890-5295-4), BH23-22 (890-5295-5), BH23-22 (890-5295-6), BH23-22 (890-5295-7), BH23-23 (890-5295-8), BH23-23 (890-5295-9), BH23-24 (890-5295-10) and BH23-24 (890-5295-11).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63153 and 880-63199 and analytical batch 880-63184 was outside the upper control limits.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-62984 and analytical batch 880-62957 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-33442-A-66-C), (880-33442-A-66-D MS) and (880-33442-A-66-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-63005 and analytical batch 880-63030 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5295-A-11-E MS) and (890-5295-A-11-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-63030/20), (CCV 880-63030/5) and (LCS 880-63005/2-A). Evidence of matrix interferences is not obvious.

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

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

Released to Imaging: 3/12/2025 9:46:11 AM

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-19

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Lab Sample ID: 890-5295-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		09/25/23 09:37	09/25/23 23:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/25/23 23:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/25/23 23:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/25/23 23:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/25/23 23:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/25/23 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*09/25/23 09:37*	*09/25/23 23:38*	*1*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*	*09/25/23 09:37*	*09/25/23 23:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/25/23 23:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/22/23 01:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/21/23 12:19	09/22/23 01:24	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/21/23 12:19	09/22/23 01:24	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/21/23 12:19	09/22/23 01:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 01:24*	*1*
o-Terphenyl	*79*		*70 - 130*	*09/21/23 12:19*	*09/22/23 01:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4260**		50.4		mg/Kg			09/22/23 12:41	10

Client Sample ID: BH23-19

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 4

Lab Sample ID: 890-5295-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:59	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/25/23 09:37	09/25/23 23:59	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/25/23 09:37	09/25/23 23:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*09/25/23 09:37*	*09/25/23 23:59*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-19

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 4

Lab Sample ID: 890-5295-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/25/23 09:37*	*09/25/23 23:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/25/23 23:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/22/23 01:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/21/23 12:19	09/22/23 01:45	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/21/23 12:19	09/22/23 01:45	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/21/23 12:19	09/22/23 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*09/21/23 12:19*	*09/22/23 01:45*	*1*
o-Terphenyl	*79*		*70 - 130*	*09/21/23 12:19*	*09/22/23 01:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.5**		5.05		mg/Kg			09/22/23 13:01	1

Client Sample ID: BH23-21

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

Lab Sample ID: 890-5295-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201		mg/Kg		09/25/23 09:37	09/26/23 00:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 00:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 00:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/25/23 09:37	09/26/23 00:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/25/23 09:37	09/26/23 00:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/25/23 09:37*	*09/26/23 00:19*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*09/25/23 09:37*	*09/26/23 00:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/23 00:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/22/23 02:06	1

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Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-21

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

Lab Sample ID: 890-5295-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:06	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:06	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:06*	*1*
o-Terphenyl	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**392**		5.02		mg/Kg			09/22/23 13:07	1

Client Sample ID: BH23-21

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Lab Sample ID: 890-5295-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		09/25/23 09:37	09/26/23 00:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 00:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 00:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/25/23 09:37	09/26/23 00:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/25/23 09:37	09/26/23 00:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*09/25/23 09:37*	*09/26/23 00:40*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/25/23 09:37*	*09/26/23 00:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/23 00:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/22/23 02:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:27	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:27	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:27*	*1*
o-Terphenyl	*74*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:27*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-21

Lab Sample ID: 890-5295-4
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	713		24.9		mg/Kg			09/22/23 13:14	5

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-5
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 01:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 01:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:00*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/23 01:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/22/23 02:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 02:47	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 02:47	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:47*	*1*
o-Terphenyl	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 02:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5670		99.4		mg/Kg			09/22/23 13:21	20

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-6
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *- *1	0.00198		mg/Kg		09/25/23 09:37	09/26/23 01:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/25/23 09:37	09/26/23 01:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/25/23 09:37	09/26/23 01:21	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/25/23 09:37	09/26/23 01:21	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/25/23 09:37	09/26/23 01:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/25/23 09:37	09/26/23 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:21*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/23 01:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/22/23 03:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/21/23 12:19	09/22/23 03:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/21/23 12:19	09/22/23 03:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/21/23 12:19	09/22/23 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:08*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**376**		4.99		mg/Kg			09/22/23 13:41	1

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-7
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:41	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:41	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 01:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 01:41	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:41*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-7
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*09/25/23 09:37*	*09/26/23 01:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/23 01:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/22/23 03:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/21/23 12:19	09/22/23 03:28	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/21/23 12:19	09/22/23 03:28	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/21/23 12:19	09/22/23 03:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:28*	*1*
o-Terphenyl	*77*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**447**		4.96		mg/Kg			09/22/23 13:47	1

Client Sample ID: BH23-23

Lab Sample ID: 890-5295-8
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/25/23 09:37	09/26/23 02:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/25/23 09:37	09/26/23 02:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:01*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/23 02:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			09/22/23 03:49	1

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-23

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

Lab Sample ID: 890-5295-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 03:49	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 03:49	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/21/23 12:19	09/22/23 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:49*	*1*
o-Terphenyl	*78*		*70 - 130*	*09/21/23 12:19*	*09/22/23 03:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.0**		5.01		mg/Kg			09/22/23 13:54	1

Client Sample ID: BH23-23

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Lab Sample ID: 890-5295-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201		mg/Kg		09/25/23 09:37	09/26/23 02:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 02:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 02:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/25/23 09:37	09/26/23 02:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/25/23 09:37	09/26/23 02:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/25/23 09:37	09/26/23 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:22*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/23 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/22/23 04:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/21/23 12:19	09/22/23 04:09	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/21/23 12:19	09/22/23 04:09	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/21/23 12:19	09/22/23 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*09/21/23 12:19*	*09/22/23 04:09*	*1*
o-Terphenyl	*73*		*70 - 130*	*09/21/23 12:19*	*09/22/23 04:09*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-23

Lab Sample ID: 890-5295-9
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		5.00		mg/Kg			09/22/23 16:43	1

Client Sample ID: BH23-24

Lab Sample ID: 890-5295-10
Matrix: Solid
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:42	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/25/23 09:37	09/26/23 02:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/25/23 09:37	09/26/23 02:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/26/23 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:42*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*09/25/23 09:37*	*09/26/23 02:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/23 02:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/22/23 04:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 04:30	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 04:30	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/21/23 12:19	09/22/23 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*09/21/23 12:19*	*09/22/23 04:30*	*1*
o-Terphenyl	*72*		*70 - 130*	*09/21/23 12:19*	*09/22/23 04:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5400		101		mg/Kg			09/22/23 14:07	20

Client Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-24

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10
Sample Depth: 2

Lab Sample ID: 890-5295-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		09/25/23 09:37	09/26/23 04:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 04:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 04:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 04:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/25/23 09:37	09/26/23 04:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/25/23 09:37	09/26/23 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*09/25/23 09:37*	*09/26/23 04:32*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/25/23 09:37*	*09/26/23 04:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/23 04:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/22/23 10:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/21/23 14:31	09/22/23 10:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/21/23 14:31	09/22/23 10:38	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/21/23 14:31	09/22/23 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*09/21/23 14:31*	*09/22/23 10:38*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/21/23 14:31*	*09/22/23 10:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2920**		100		mg/Kg			09/22/23 14:14	20

Surrogate Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)								
890-5295-1	BH23-19	84	129								
890-5295-1 MS	BH23-19	96	105								
890-5295-1 MSD	BH23-19	99	98								
890-5295-2	BH23-19	90	111								
890-5295-3	BH23-21	95	111								
890-5295-4	BH23-21	95	109								
890-5295-5	BH23-22	96	110								
890-5295-6	BH23-22	104	108								
890-5295-7	BH23-22	98	112								
890-5295-8	BH23-23	100	105								
890-5295-9	BH23-23	97	117								
890-5295-10	BH23-24	104	115								
890-5295-11	BH23-24	87	104								
LCS 880-63199/1-A	Lab Control Sample	96	106								
MB 880-63153/5-A	Method Blank	117	136 S1+								
MB 880-63199/5-A	Method Blank	129	153 S1+								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	BFB1	DFBZ1								
LCSD 880-63199/2-A	Lab Control Sample Dup										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
880-33442-A-66-D MS	Matrix Spike	76	64 S1-								
880-33442-A-66-E MSD	Matrix Spike Duplicate	77	65 S1-								
890-5295-1	BH23-19	77	79								
890-5295-2	BH23-19	78	79								
890-5295-3	BH23-21	77	77								
890-5295-4	BH23-21	77	74								
890-5295-5	BH23-22	77	77								
890-5295-6	BH23-22	80	80								
890-5295-7	BH23-22	77	77								
890-5295-8	BH23-23	79	78								
890-5295-9	BH23-23	72	73								
890-5295-10	BH23-24	71	72								

Surrogate Summary

Client: Vertex Job ID: 890-5295-1
Project/Site: Mobley SDG: 23E-04909

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-5295-11	BH23-24	117	104										
890-5295-11 MS	BH23-24	131 S1+	107										
890-5295-11 MSD	BH23-24	137 S1+	111										
LCS 880-62984/2-A	Lab Control Sample	78	74										
LCS 880-63005/2-A	Lab Control Sample	117	151 S1+										
LCSD 880-62984/3-A	Lab Control Sample Dup	100	96										
LCSD 880-63005/3-A	Lab Control Sample Dup	111	111										
MB 880-62984/1-A	Method Blank	113	121										
MB 880-63005/1-A	Method Blank	191 S1+	182 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63153/5-A
Matrix: Solid
Analysis Batch: 63184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/24/23 15:16	09/25/23 11:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/24/23 15:16	09/25/23 11:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/24/23 15:16	09/25/23 11:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/24/23 15:16	09/25/23 11:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/24/23 15:16	09/25/23 11:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/24/23 15:16	09/25/23 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/24/23 15:16*	*09/25/23 11:32*	*1*
1,4-Difluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*09/24/23 15:16*	*09/25/23 11:32*	*1*

Lab Sample ID: MB 880-63199/5-A
Matrix: Solid
Analysis Batch: 63184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63199

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/25/23 09:37	09/25/23 23:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/25/23 09:37	09/25/23 23:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/23 09:37	09/25/23 23:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*09/25/23 09:37*	*09/25/23 23:10*	*1*
1,4-Difluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*09/25/23 09:37*	*09/25/23 23:10*	*1*

Lab Sample ID: LCS 880-63199/1-A
Matrix: Solid
Analysis Batch: 63184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63199

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09070		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.07320		mg/Kg		73	70 - 130
Toluene	0.100	0.08084		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.200	0.1773		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08843		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-63199/2-A
Matrix: Solid
Analysis Batch: 63184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63199

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09948		mg/Kg					

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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

Lab Sample ID: LCSD 880-63199/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63184 — **Prep Batch: 63199**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene			0.100	0.08923		mg/Kg					
Toluene			0.100	0.09034		mg/Kg					
m-Xylene & p-Xylene			0.200	0.2158		mg/Kg					
o-Xylene			0.100	0.1051		mg/Kg					

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

Lab Sample ID: 890-5295-1 MS — **Client Sample ID: BH23-19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63184 — **Prep Batch: 63199**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U *- *1	0.0998	0.09215		mg/Kg		92	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.07646		mg/Kg		77	70 - 130
Toluene	<0.00199	U	0.0998	0.08220		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1797		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08739		mg/Kg		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-5295-1 MSD — **Client Sample ID: BH23-19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63184 — **Prep Batch: 63199**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U *- *1	0.0990	0.08477		mg/Kg		86	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.0990	0.07253		mg/Kg		73	70 - 130	5	35
Toluene	<0.00199	U	0.0990	0.07573		mg/Kg		76	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1818		mg/Kg		92	70 - 130	1	35
o-Xylene	<0.00199	U	0.0990	0.09037		mg/Kg		91	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-62984/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62957 — **Prep Batch: 62984**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/21/23 12:19	09/21/23 19:52	1

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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

Lab Sample ID: MB 880-62984/1-A
Matrix: Solid
Analysis Batch: 62957

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/21/23 12:19	09/21/23 19:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/23 12:19	09/21/23 19:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/21/23 12:19*	*09/21/23 19:52*	*1*
o-Terphenyl	*121*		*70 - 130*	*09/21/23 12:19*	*09/21/23 19:52*	*1*

Lab Sample ID: LCS 880-62984/2-A
Matrix: Solid
Analysis Batch: 62957

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	846.0		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	983.7		mg/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Lab Sample ID: LCSD 880-62984/3-A
Matrix: Solid
Analysis Batch: 62957

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62984

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	860.6		mg/Kg		86	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	949.4		mg/Kg		95	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-33442-A-66-D MS
Matrix: Solid
Analysis Batch: 62957

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62984

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	997	728.4		mg/Kg		70	70 - 130
Diesel Range Organics (Over C10-C28)	135	F1	997	796.6	F1	mg/Kg		66	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*76*		*70 - 130*
o-Terphenyl	*64*	*S1-*	*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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

Lab Sample ID: 880-33442-A-66-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 62957 — **Prep Batch: 62984**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	997	728.6		mg/Kg		70	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	135	F1	997	805.6	F1	mg/Kg		67	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*77*		*70 - 130*
o-Terphenyl	*65*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-63005/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63005**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/21/23 14:31	09/22/23 08:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/21/23 14:31	09/22/23 08:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/21/23 14:31	09/22/23 08:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*191*	*S1+*	*70 - 130*	*09/21/23 14:31*	*09/22/23 08:05*	*1*
o-Terphenyl	*182*	*S1+*	*70 - 130*	*09/21/23 14:31*	*09/22/23 08:05*	*1*

Lab Sample ID: LCS 880-63005/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63005**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1005		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	997.6		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*151*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-63005/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63005**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1031		mg/Kg		103	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1015		mg/Kg		101	70 - 130	2	20

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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

Lab Sample ID: LCSD 880-63005/3-A
Matrix: Solid
Analysis Batch: 63030

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63005

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 890-5295-11 MS
Matrix: Solid
Analysis Batch: 63030

Client Sample ID: BH23-24
Prep Type: Total/NA
Prep Batch: 63005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	924.5		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1263		mg/Kg		123	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	131	S1+	70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-5295-11 MSD
Matrix: Solid
Analysis Batch: 63030

Client Sample ID: BH23-24
Prep Type: Total/NA
Prep Batch: 63005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	987.6		mg/Kg		95	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1312		mg/Kg		128	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	111		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-62978/1-A
Matrix: Solid
Analysis Batch: 63069

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		mg/Kg			09/22/23 12:21	1

Lab Sample ID: LCS 880-62978/2-A
Matrix: Solid
Analysis Batch: 63069

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.9		mg/Kg		103	90 - 110

QC Sample Results

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-62978/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63069

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	256.8		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5295-1 MS — **Client Sample ID: BH23-19**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4260		2520	6889		mg/Kg		104	90 - 110		

Lab Sample ID: 890-5295-1 MSD — **Client Sample ID: BH23-19**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4260		2520	6871		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-5295-11 MS — **Client Sample ID: BH23-24**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2920		5020	7958		mg/Kg		100	90 - 110		

Lab Sample ID: 890-5295-11 MSD — **Client Sample ID: BH23-24**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2920		5020	7982		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

GC VOA

Prep Batch: 63153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63153/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 63184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	8021B	63199
890-5295-2	BH23-19	Total/NA	Solid	8021B	63199
890-5295-3	BH23-21	Total/NA	Solid	8021B	63199
890-5295-4	BH23-21	Total/NA	Solid	8021B	63199
890-5295-5	BH23-22	Total/NA	Solid	8021B	63199
890-5295-6	BH23-22	Total/NA	Solid	8021B	63199
890-5295-7	BH23-22	Total/NA	Solid	8021B	63199
890-5295-8	BH23-23	Total/NA	Solid	8021B	63199
890-5295-9	BH23-23	Total/NA	Solid	8021B	63199
890-5295-10	BH23-24	Total/NA	Solid	8021B	63199
890-5295-11	BH23-24	Total/NA	Solid	8021B	63199
MB 880-63153/5-A	Method Blank	Total/NA	Solid	8021B	63153
MB 880-63199/5-A	Method Blank	Total/NA	Solid	8021B	63199
LCS 880-63199/1-A	Lab Control Sample	Total/NA	Solid	8021B	63199
LCSD 880-63199/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63199
890-5295-1 MS	BH23-19	Total/NA	Solid	8021B	63199
890-5295-1 MSD	BH23-19	Total/NA	Solid	8021B	63199

Prep Batch: 63199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	5035	
890-5295-2	BH23-19	Total/NA	Solid	5035	
890-5295-3	BH23-21	Total/NA	Solid	5035	
890-5295-4	BH23-21	Total/NA	Solid	5035	
890-5295-5	BH23-22	Total/NA	Solid	5035	
890-5295-6	BH23-22	Total/NA	Solid	5035	
890-5295-7	BH23-22	Total/NA	Solid	5035	
890-5295-8	BH23-23	Total/NA	Solid	5035	
890-5295-9	BH23-23	Total/NA	Solid	5035	
890-5295-10	BH23-24	Total/NA	Solid	5035	
890-5295-11	BH23-24	Total/NA	Solid	5035	
MB 880-63199/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63199/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63199/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5295-1 MS	BH23-19	Total/NA	Solid	5035	
890-5295-1 MSD	BH23-19	Total/NA	Solid	5035	

Analysis Batch: 63341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	Total BTEX	
890-5295-2	BH23-19	Total/NA	Solid	Total BTEX	
890-5295-3	BH23-21	Total/NA	Solid	Total BTEX	
890-5295-4	BH23-21	Total/NA	Solid	Total BTEX	
890-5295-5	BH23-22	Total/NA	Solid	Total BTEX	
890-5295-6	BH23-22	Total/NA	Solid	Total BTEX	
890-5295-7	BH23-22	Total/NA	Solid	Total BTEX	
890-5295-8	BH23-23	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

GC VOA (Continued)

Analysis Batch: 63341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-9	BH23-23	Total/NA	Solid	Total BTEX	
890-5295-10	BH23-24	Total/NA	Solid	Total BTEX	
890-5295-11	BH23-24	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 62957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	8015B NM	62984
890-5295-2	BH23-19	Total/NA	Solid	8015B NM	62984
890-5295-3	BH23-21	Total/NA	Solid	8015B NM	62984
890-5295-4	BH23-21	Total/NA	Solid	8015B NM	62984
890-5295-5	BH23-22	Total/NA	Solid	8015B NM	62984
890-5295-6	BH23-22	Total/NA	Solid	8015B NM	62984
890-5295-7	BH23-22	Total/NA	Solid	8015B NM	62984
890-5295-8	BH23-23	Total/NA	Solid	8015B NM	62984
890-5295-9	BH23-23	Total/NA	Solid	8015B NM	62984
890-5295-10	BH23-24	Total/NA	Solid	8015B NM	62984
MB 880-62984/1-A	Method Blank	Total/NA	Solid	8015B NM	62984
LCS 880-62984/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	62984
LCSD 880-62984/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	62984
880-33442-A-66-D MS	Matrix Spike	Total/NA	Solid	8015B NM	62984
880-33442-A-66-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	62984

Prep Batch: 62984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	8015NM Prep	
890-5295-2	BH23-19	Total/NA	Solid	8015NM Prep	
890-5295-3	BH23-21	Total/NA	Solid	8015NM Prep	
890-5295-4	BH23-21	Total/NA	Solid	8015NM Prep	
890-5295-5	BH23-22	Total/NA	Solid	8015NM Prep	
890-5295-6	BH23-22	Total/NA	Solid	8015NM Prep	
890-5295-7	BH23-22	Total/NA	Solid	8015NM Prep	
890-5295-8	BH23-23	Total/NA	Solid	8015NM Prep	
890-5295-9	BH23-23	Total/NA	Solid	8015NM Prep	
890-5295-10	BH23-24	Total/NA	Solid	8015NM Prep	
MB 880-62984/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-62984/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-62984/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33442-A-66-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33442-A-66-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 63005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-11	BH23-24	Total/NA	Solid	8015NM Prep	
MB 880-63005/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63005/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63005/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5295-11 MS	BH23-24	Total/NA	Solid	8015NM Prep	
890-5295-11 MSD	BH23-24	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

GC Semi VOA

Analysis Batch: 63030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-11	BH23-24	Total/NA	Solid	8015B NM	63005
MB 880-63005/1-A	Method Blank	Total/NA	Solid	8015B NM	63005
LCS 880-63005/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63005
LCSD 880-63005/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63005
890-5295-11 MS	BH23-24	Total/NA	Solid	8015B NM	63005
890-5295-11 MSD	BH23-24	Total/NA	Solid	8015B NM	63005

Analysis Batch: 63089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Total/NA	Solid	8015 NM	
890-5295-2	BH23-19	Total/NA	Solid	8015 NM	
890-5295-3	BH23-21	Total/NA	Solid	8015 NM	
890-5295-4	BH23-21	Total/NA	Solid	8015 NM	
890-5295-5	BH23-22	Total/NA	Solid	8015 NM	
890-5295-6	BH23-22	Total/NA	Solid	8015 NM	
890-5295-7	BH23-22	Total/NA	Solid	8015 NM	
890-5295-8	BH23-23	Total/NA	Solid	8015 NM	
890-5295-9	BH23-23	Total/NA	Solid	8015 NM	
890-5295-10	BH23-24	Total/NA	Solid	8015 NM	
890-5295-11	BH23-24	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 62978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Soluble	Solid	DI Leach	
890-5295-2	BH23-19	Soluble	Solid	DI Leach	
890-5295-3	BH23-21	Soluble	Solid	DI Leach	
890-5295-4	BH23-21	Soluble	Solid	DI Leach	
890-5295-5	BH23-22	Soluble	Solid	DI Leach	
890-5295-6	BH23-22	Soluble	Solid	DI Leach	
890-5295-7	BH23-22	Soluble	Solid	DI Leach	
890-5295-8	BH23-23	Soluble	Solid	DI Leach	
890-5295-9	BH23-23	Soluble	Solid	DI Leach	
890-5295-10	BH23-24	Soluble	Solid	DI Leach	
890-5295-11	BH23-24	Soluble	Solid	DI Leach	
MB 880-62978/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62978/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62978/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5295-1 MS	BH23-19	Soluble	Solid	DI Leach	
890-5295-1 MSD	BH23-19	Soluble	Solid	DI Leach	
890-5295-11 MS	BH23-24	Soluble	Solid	DI Leach	
890-5295-11 MSD	BH23-24	Soluble	Solid	DI Leach	

Analysis Batch: 63069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-1	BH23-19	Soluble	Solid	300.0	62978
890-5295-2	BH23-19	Soluble	Solid	300.0	62978
890-5295-3	BH23-21	Soluble	Solid	300.0	62978
890-5295-4	BH23-21	Soluble	Solid	300.0	62978
890-5295-5	BH23-22	Soluble	Solid	300.0	62978

QC Association Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

HPLC/IC (Continued)

Analysis Batch: 63069 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5295-6	BH23-22	Soluble	Solid	300.0	62978
890-5295-7	BH23-22	Soluble	Solid	300.0	62978
890-5295-8	BH23-23	Soluble	Solid	300.0	62978
890-5295-9	BH23-23	Soluble	Solid	300.0	62978
890-5295-10	BH23-24	Soluble	Solid	300.0	62978
890-5295-11	BH23-24	Soluble	Solid	300.0	62978
MB 880-62978/1-A	Method Blank	Soluble	Solid	300.0	62978
LCS 880-62978/2-A	Lab Control Sample	Soluble	Solid	300.0	62978
LCSD 880-62978/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62978
890-5295-1 MS	BH23-19	Soluble	Solid	300.0	62978
890-5295-1 MSD	BH23-19	Soluble	Solid	300.0	62978
890-5295-11 MS	BH23-24	Soluble	Solid	300.0	62978
890-5295-11 MSD	BH23-24	Soluble	Solid	300.0	62978

Lab Chronicle

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-19

Lab Sample ID: 890-5295-1

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

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	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/25/23 23:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/25/23 23:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 01:24	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 01:24	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63069	09/22/23 12:41	SMC	EET MID

Client Sample ID: BH23-19

Lab Sample ID: 890-5295-2

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

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	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/25/23 23:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/25/23 23:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 01:45	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 01:45	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 13:01	SMC	EET MID

Client Sample ID: BH23-21

Lab Sample ID: 890-5295-3

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 00:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 00:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 02:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 02:06	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 13:07	SMC	EET MID

Client Sample ID: BH23-21

Lab Sample ID: 890-5295-4

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 00:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 00:40	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-21

Lab Sample ID: 890-5295-4

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

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			63089	09/22/23 02:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 02:27	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63069	09/22/23 13:14	SMC	EET MID

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-5

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 01:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 01:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 02:47	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 02:47	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63069	09/22/23 13:21	SMC	EET MID

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-6

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 01:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 01:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 03:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 03:08	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 13:41	SMC	EET MID

Client Sample ID: BH23-22

Lab Sample ID: 890-5295-7

Date Collected: 09/18/23 00:00
Matrix: Solid
Date Received: 09/19/23 14:10

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	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 01:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 01:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 03:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 03:28	AJ	EET MID

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Released to Imaging: 3/12/2025 9:46:11 AM

Lab Chronicle

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-22
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10

Lab Sample ID: 890-5295-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 13:47	SMC	EET MID

Client Sample ID: BH23-23
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10

Lab Sample ID: 890-5295-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 02:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 02:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 03:49	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 03:49	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 13:54	SMC	EET MID

Client Sample ID: BH23-23
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10

Lab Sample ID: 890-5295-9
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			4.97 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 02:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 02:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 04:09	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 04:09	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63069	09/22/23 16:43	SMC	EET MID

Client Sample ID: BH23-24
Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10

Lab Sample ID: 890-5295-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 02:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 02:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 04:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	62984	09/21/23 12:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	62957	09/22/23 04:30	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63069	09/22/23 14:07	SMC	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Client Sample ID: BH23-24

Date Collected: 09/18/23 00:00
Date Received: 09/19/23 14:10

Lab Sample ID: 890-5295-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63199	09/25/23 09:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63184	09/26/23 04:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63341	09/26/23 04:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			63089	09/22/23 10:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	63005	09/21/23 14:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 10:38	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	62978	09/21/23 11:12	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63069	09/22/23 14:14	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley

Job ID: 890-5295-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5295-1	BH23-19	Solid	09/18/23 00:00	09/19/23 14:10	2
890-5295-2	BH23-19	Solid	09/18/23 00:00	09/19/23 14:10	4
890-5295-3	BH23-21	Solid	09/18/23 00:00	09/19/23 14:10	0
890-5295-4	BH23-21	Solid	09/18/23 00:00	09/19/23 14:10	2
890-5295-5	BH23-22	Solid	09/18/23 00:00	09/19/23 14:10	0
890-5295-6	BH23-22	Solid	09/18/23 00:00	09/19/23 14:10	2
890-5295-7	BH23-22	Solid	09/18/23 00:00	09/19/23 14:10	4
890-5295-8	BH23-23	Solid	09/18/23 00:00	09/19/23 14:10	0
890-5295-9	BH23-23	Solid	09/18/23 00:00	09/19/23 14:10	2
890-5295-10	BH23-24	Solid	09/18/23 00:00	09/19/23 14:10	0
890-5295-11	BH23-24	Solid	09/18/23 00:00	09/19/23 14:10	2

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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: _____

www.xenco.com Page 1 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	On File	Address:	On file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:	/	Email:	

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:		Turn Around	
Project Number:	23E-04909	☐ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	
Sampler's Name:	Bryce Mortimer	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:	TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	10.4
Total Containers:		Corrected Temperature:	

ANALYSIS REQUEST

Pres. Code / Parameters: BTEX, TPH 8015D, Cl

890-5295 Chain of Custody

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	Sample Comments
BH23-19		9-18-23		2'			
BH23-19				4'			
BH23-21				0'			
BH23-21				2'			
BH23-22				0'			
BH23-22				2'			
BH23-22				4'			
BH23-23				0'			
BH23-23				2'			
BH23-24				0'			

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 BM		9/19 1410	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Please cc Bryce Mortimer at BMortimer@vertex.ca

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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: _____

www.xenco.com Page 2 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	On file	Address:	On file
City, State ZIP:		City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☐ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	
Sampler's Name:	Bryce Mortimer	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:	T.NM.007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	10.4
Total Containers:		Corrected Temperature:	

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	BTEX	TPH 8015D	Cl	Sample Comments
BH23-24		9-18-23		2'							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 BM		9/19 1410	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Please cc Bryce Mortimer at BMortimer@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5295-1
SDG Number: 23E-04909

Login Number: 5295
List Number: 1
Creator: Lopez, Abraham

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.	N/A	Refer to Job Narrative for details.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5295-1
SDG Number: 23E-04909

Login Number: 5295
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/21/23 10:54 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

Mobley Water Recycling
SDG NUMBER Mobley

JOB NUMBER

890-5315-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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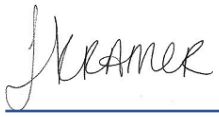
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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

Client: Vertex
Project/Site: Mobley Water Recycling

Laboratory Job ID: 890-5315-1
SDG: Mobley

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 13
QC Sample Results 14
QC Association Summary 18
Lab Chronicle 21
Certification Summary 24
Method Summary 25
Sample Summary 26
Chain of Custody 27
Receipt Checklists 28

Definitions/Glossary

Client: Vertex Job ID: 890-5315-1
Project/Site: Mobley Water Recycling SDG: Mobley

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low 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: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Job ID: 890-5315-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5315-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/21/2023 8:25 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-25 0' (890-5315-1), BH23-25 2' (890-5315-2), BH23-26 0' (890-5315-3), BH23-26 2' (890-5315-4), BH23-27 4' (890-5315-5), BH23-27 0' (890-5315-6), BH23-27 2' (890-5315-7), BH23-28 0' (890-5315-8) and BH23-28 2' (890-5315-9).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63094 and analytical batch 880-63185 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23-25 2' (890-5315-2), BH23-26 0' (890-5315-3), BH23-27 4' (890-5315-5), BH23-27 0' (890-5315-6), BH23-27 2' (890-5315-7), BH23-28 0' (890-5315-8) and BH23-28 2' (890-5315-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63185 recovered above the upper control limit for Ethylbenzene, Toluene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-63096/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63096 and analytical batch 880-63134 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-25 0'

Date Collected: 09/19/23 10:34
Date Received: 09/21/23 08:25
Sample Depth: 0'

Lab Sample ID: 890-5315-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 12:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 12:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 12:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 12:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 12:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/22/23 14:56*	*09/25/23 12:11*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*09/22/23 14:56*	*09/25/23 12:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/25/23 12:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U F1	50.3		mg/Kg		09/22/23 14:59	09/23/23 11:10	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/22/23 14:59	09/23/23 11:10	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/22/23 14:59	09/23/23 11:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*09/22/23 14:59*	*09/23/23 11:10*	*1*
o-Terphenyl	*91*		*70 - 130*	*09/22/23 14:59*	*09/23/23 11:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**118**		5.00		mg/Kg			09/26/23 03:53	1

Client Sample ID: BH23-25 2'

Date Collected: 09/19/23 10:43
Date Received: 09/21/23 08:25
Sample Depth: 2'

Lab Sample ID: 890-5315-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 12:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 12:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 12:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:56	09/25/23 12:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:56	09/25/23 12:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*162*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 12:38*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*09/22/23 14:56*	*09/25/23 12:38*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-25 2'

Lab Sample ID: 890-5315-2
Matrix: Solid
Date Collected: 09/19/23 10:43
Date Received: 09/21/23 08:25
Sample Depth: 2'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/25/23 12:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:14	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:14	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:14*	*1*
o-Terphenyl	*93*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87.0**		5.04		mg/Kg			09/26/23 04:11	1

Client Sample ID: BH23-26 0'

Lab Sample ID: 890-5315-3
Matrix: Solid
Date Collected: 09/19/23 11:59
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:56	09/25/23 13:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:56	09/25/23 13:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:56	09/25/23 13:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/23 14:56	09/25/23 13:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/23 14:56	09/25/23 13:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:56	09/25/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 13:05*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*09/22/23 14:56*	*09/25/23 13:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/25/23 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:35	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:35	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/22/23 14:59	09/23/23 12:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:35*	*1*
o-Terphenyl	*84*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:35*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-26 0'

Lab Sample ID: 890-5315-3
Matrix: Solid
Date Collected: 09/19/23 11:59
Date Received: 09/21/23 08:25
Sample Depth: 0'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97		mg/Kg			09/26/23 04:16	1

Client Sample ID: BH23-26 2'

Lab Sample ID: 890-5315-4
Matrix: Solid
Date Collected: 09/19/23 12:02
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 13:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 13:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 13:31	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/23 14:56	09/25/23 13:31	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/23 14:56	09/25/23 13:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*09/22/23 14:56*	*09/25/23 13:31*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/22/23 14:56*	*09/25/23 13:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/25/23 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		09/22/23 14:59	09/23/23 12:56	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		09/22/23 14:59	09/23/23 12:56	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		09/22/23 14:59	09/23/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:56*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/22/23 14:59*	*09/23/23 12:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		4.96		mg/Kg			09/26/23 04:34	1

Client Sample ID: BH23-27 4'

Lab Sample ID: 890-5315-5
Matrix: Solid
Date Collected: 09/19/23 11:32
Date Received: 09/21/23 08:25
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 13:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 13:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 13:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 13:57	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-27 4'

Lab Sample ID: 890-5315-5
Matrix: Solid
Date Collected: 09/19/23 11:32
Date Received: 09/21/23 08:25
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 13:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 13:57*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*09/22/23 14:56*	*09/25/23 13:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/25/23 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/22/23 14:59	09/23/23 13:18	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/22/23 14:59	09/23/23 13:18	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/22/23 14:59	09/23/23 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/22/23 14:59*	*09/23/23 13:18*	*1*
o-Terphenyl	*91*		*70 - 130*	*09/22/23 14:59*	*09/23/23 13:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5760**		50.1		mg/Kg			09/26/23 04:40	10

Client Sample ID: BH23-27 0'

Lab Sample ID: 890-5315-6
Matrix: Solid
Date Collected: 09/19/23 11:39
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 14:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 14:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 14:24	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/22/23 14:56	09/25/23 14:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/22/23 14:56	09/25/23 14:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 14:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/22/23 14:56*	*09/25/23 14:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/25/23 14:24	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-27 0'

Lab Sample ID: 890-5315-6
Matrix: Solid
Date Collected: 09/19/23 11:39
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 13:39	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 13:39	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*09/22/23 14:59*	*09/23/23 13:39*	*1*
o-Terphenyl	*85*		*70 - 130*	*09/22/23 14:59*	*09/23/23 13:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**174**		4.95		mg/Kg			09/26/23 04:46	1

Client Sample ID: BH23-27 2'

Lab Sample ID: 890-5315-7
Matrix: Solid
Date Collected: 09/19/23 11:45
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 14:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 14:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 14:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 14:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:56	09/25/23 14:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:56	09/25/23 14:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 14:51*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/22/23 14:56*	*09/25/23 14:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/25/23 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/22/23 14:59	09/23/23 14:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/22/23 14:59	09/23/23 14:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/22/23 14:59	09/23/23 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:00*	*1*
o-Terphenyl	*96*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.0**		5.02		mg/Kg			09/26/23 04:51	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-28 0'

Lab Sample ID: 890-5315-8
Matrix: Solid
Date Collected: 09/19/23 11:13
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 15:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 15:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 15:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:56	09/25/23 15:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:56	09/25/23 15:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*156*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 15:17*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/22/23 14:56*	*09/25/23 15:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/25/23 15:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/22/23 14:59	09/23/23 14:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/22/23 14:59	09/23/23 14:22	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/22/23 14:59	09/23/23 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:22*	*1*
o-Terphenyl	*83*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**470**		25.2		mg/Kg			09/26/23 04:57	5

Client Sample ID: BH23-28 2'

Lab Sample ID: 890-5315-9
Matrix: Solid
Date Collected: 09/19/23 11:23
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 15:43	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 15:43	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 15:43	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/22/23 14:56	09/25/23 15:43	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/22/23 14:56	09/25/23 15:43	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/22/23 14:56	09/25/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/25/23 15:43*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*09/22/23 14:56*	*09/25/23 15:43*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-28 2'

Date Collected: 09/19/23 11:23
Date Received: 09/21/23 08:25
Sample Depth: 2'

Lab Sample ID: 890-5315-9

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/25/23 15:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 14:43	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 14:43	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/22/23 14:59	09/23/23 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:43*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/22/23 14:59*	*09/23/23 14:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**547**		24.9		mg/Kg			09/26/23 05:03	5

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

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)
890-5315-1	BH23-25 0'	116	104
890-5315-1 MS	BH23-25 0'	90	96
890-5315-1 MSD	BH23-25 0'	112	97
890-5315-2	BH23-25 2'	162 S1+	119
890-5315-3	BH23-26 0'	152 S1+	117
890-5315-4	BH23-26 2'	127	93
890-5315-5	BH23-27 4'	140 S1+	102
890-5315-6	BH23-27 0'	134 S1+	97
890-5315-7	BH23-27 2'	137 S1+	93
890-5315-8	BH23-28 0'	156 S1+	108
890-5315-9	BH23-28 2'	138 S1+	114
LCS 880-63094/1-A	Lab Control Sample	98	97
LCSD 880-63094/2-A	Lab Control Sample Dup	106	105
MB 880-63094/5-A	Method Blank	68 S1-	90

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)
890-5315-1	BH23-25 0'	80	91
890-5315-1 MS	BH23-25 0'	79	75
890-5315-1 MSD	BH23-25 0'	80	77
890-5315-2	BH23-25 2'	81	93
890-5315-3	BH23-26 0'	77	84
890-5315-4	BH23-26 2'	79	88
890-5315-5	BH23-27 4'	82	91
890-5315-6	BH23-27 0'	79	85
890-5315-7	BH23-27 2'	88	96
890-5315-8	BH23-28 0'	78	83
890-5315-9	BH23-28 2'	84	90
LCS 880-63096/2-A	Lab Control Sample	59 S1-	62 S1-
LCSD 880-63096/3-A	Lab Control Sample Dup	75	82
MB 880-63096/1-A	Method Blank	109	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63094/5-A
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 11:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 11:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 11:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/22/23 14:56	09/25/23 11:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/22/23 14:56	09/25/23 11:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:56	09/25/23 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*09/22/23 14:56*	*09/25/23 11:44*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*09/22/23 14:56*	*09/25/23 11:44*	*1*

Lab Sample ID: LCS 880-63094/1-A
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1071		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1059		mg/Kg		106	70 - 130
Toluene	0.100	0.1060		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2085		mg/Kg		104	70 - 130
o-Xylene	0.100	0.09705		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-63094/2-A
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63094

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1106		mg/Kg		111	70 - 130	3	35
Ethylbenzene	0.100	0.1033		mg/Kg		103	70 - 130	3	35
Toluene	0.100	0.1118		mg/Kg		112	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2073		mg/Kg		104	70 - 130	1	35
o-Xylene	0.100	0.1041		mg/Kg		104	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-5315-1 MS
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: BH23-25 0'
Prep Type: Total/NA
Prep Batch: 63094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.09256		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.08653		mg/Kg		86	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

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

Lab Sample ID: 890-5315-1 MS
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: BH23-25 0'
Prep Type: Total/NA
Prep Batch: 63094

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00199	U	0.0998	0.09644		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1704		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08172		mg/Kg		82	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-5315-1 MSD
Matrix: Solid
Analysis Batch: 63185

Client Sample ID: BH23-25 0'
Prep Type: Total/NA
Prep Batch: 63094

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1076		mg/Kg		109	70 - 130	15	35
Ethylbenzene	<0.00199	U	0.0990	0.1048		mg/Kg		105	70 - 130	19	35
Toluene	<0.00199	U	0.0990	0.1095		mg/Kg		111	70 - 130	13	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.2084		mg/Kg		105	70 - 130	20	35
o-Xylene	<0.00199	U	0.0990	0.1029		mg/Kg		104	70 - 130	23	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-63096/1-A
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/23 14:59	09/23/23 08:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/23 14:59	09/23/23 08:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/23 14:59	09/23/23 08:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*09/22/23 14:59*	*09/23/23 08:04*	*1*
o-Terphenyl	*126*		*70 - 130*	*09/22/23 14:59*	*09/23/23 08:04*	*1*

Lab Sample ID: LCS 880-63096/2-A
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	848.5		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	746.1		mg/Kg		75	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

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

Lab Sample ID: LCS 880-63096/2-A
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63096

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	59	S1-	70 - 130
o-Terphenyl	62	S1-	70 - 130

Lab Sample ID: LCSD 880-63096/3-A
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63096

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	890.5		mg/Kg		89	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	743.5		mg/Kg		74	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 890-5315-1 MS
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: BH23-25 0'
Prep Type: Total/NA
Prep Batch: 63096

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U F1	995	718.3	F1	mg/Kg		69	70 - 130
Diesel Range Organics (Over C10-C28)	<50.3	U	995	759.7		mg/Kg		76	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 890-5315-1 MSD
Matrix: Solid
Analysis Batch: 63134

Client Sample ID: BH23-25 0'
Prep Type: Total/NA
Prep Batch: 63096

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U F1	995	740.6		mg/Kg		71	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.3	U	995	782.1		mg/Kg		79	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	80		70 - 130
o-Terphenyl	77		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63065/1-A
Matrix: Solid
Analysis Batch: 63237

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		mg/Kg			09/26/23 02:14	1

Lab Sample ID: LCS 880-63065/2-A
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	249.9		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-63065/3-A
Matrix: Solid
Analysis Batch: 63237

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	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-5315-1 MS
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: BH23-25 0'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	118		250	379.9		mg/Kg		105	90 - 110		

Lab Sample ID: 890-5315-1 MSD
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: BH23-25 0'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	118		250	380.2		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

GC VOA

Prep Batch: 63094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Total/NA	Solid	5035	
890-5315-2	BH23-25 2'	Total/NA	Solid	5035	
890-5315-3	BH23-26 0'	Total/NA	Solid	5035	
890-5315-4	BH23-26 2'	Total/NA	Solid	5035	
890-5315-5	BH23-27 4'	Total/NA	Solid	5035	
890-5315-6	BH23-27 0'	Total/NA	Solid	5035	
890-5315-7	BH23-27 2'	Total/NA	Solid	5035	
890-5315-8	BH23-28 0'	Total/NA	Solid	5035	
890-5315-9	BH23-28 2'	Total/NA	Solid	5035	
MB 880-63094/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63094/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63094/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5315-1 MS	BH23-25 0'	Total/NA	Solid	5035	
890-5315-1 MSD	BH23-25 0'	Total/NA	Solid	5035	

Analysis Batch: 63185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Total/NA	Solid	8021B	63094
890-5315-2	BH23-25 2'	Total/NA	Solid	8021B	63094
890-5315-3	BH23-26 0'	Total/NA	Solid	8021B	63094
890-5315-4	BH23-26 2'	Total/NA	Solid	8021B	63094
890-5315-5	BH23-27 4'	Total/NA	Solid	8021B	63094
890-5315-6	BH23-27 0'	Total/NA	Solid	8021B	63094
890-5315-7	BH23-27 2'	Total/NA	Solid	8021B	63094
890-5315-8	BH23-28 0'	Total/NA	Solid	8021B	63094
890-5315-9	BH23-28 2'	Total/NA	Solid	8021B	63094
MB 880-63094/5-A	Method Blank	Total/NA	Solid	8021B	63094
LCS 880-63094/1-A	Lab Control Sample	Total/NA	Solid	8021B	63094
LCSD 880-63094/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63094
890-5315-1 MS	BH23-25 0'	Total/NA	Solid	8021B	63094
890-5315-1 MSD	BH23-25 0'	Total/NA	Solid	8021B	63094

Analysis Batch: 63348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Total/NA	Solid	Total BTEX	
890-5315-2	BH23-25 2'	Total/NA	Solid	Total BTEX	
890-5315-3	BH23-26 0'	Total/NA	Solid	Total BTEX	
890-5315-4	BH23-26 2'	Total/NA	Solid	Total BTEX	
890-5315-5	BH23-27 4'	Total/NA	Solid	Total BTEX	
890-5315-6	BH23-27 0'	Total/NA	Solid	Total BTEX	
890-5315-7	BH23-27 2'	Total/NA	Solid	Total BTEX	
890-5315-8	BH23-28 0'	Total/NA	Solid	Total BTEX	
890-5315-9	BH23-28 2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Total/NA	Solid	8015NM Prep	
890-5315-2	BH23-25 2'	Total/NA	Solid	8015NM Prep	
890-5315-3	BH23-26 0'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

GC Semi VOA (Continued)

Prep Batch: 63096 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-4	BH23-26 2'	Total/NA	Solid	8015NM Prep	
890-5315-5	BH23-27 4'	Total/NA	Solid	8015NM Prep	
890-5315-6	BH23-27 0'	Total/NA	Solid	8015NM Prep	
890-5315-7	BH23-27 2'	Total/NA	Solid	8015NM Prep	
890-5315-8	BH23-28 0'	Total/NA	Solid	8015NM Prep	
890-5315-9	BH23-28 2'	Total/NA	Solid	8015NM Prep	
MB 880-63096/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63096/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63096/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5315-1 MS	BH23-25 0'	Total/NA	Solid	8015NM Prep	
890-5315-1 MSD	BH23-25 0'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Total/NA	Solid	8015B NM	63096
890-5315-2	BH23-25 2'	Total/NA	Solid	8015B NM	63096
890-5315-3	BH23-26 0'	Total/NA	Solid	8015B NM	63096
890-5315-4	BH23-26 2'	Total/NA	Solid	8015B NM	63096
890-5315-5	BH23-27 4'	Total/NA	Solid	8015B NM	63096
890-5315-6	BH23-27 0'	Total/NA	Solid	8015B NM	63096
890-5315-7	BH23-27 2'	Total/NA	Solid	8015B NM	63096
890-5315-8	BH23-28 0'	Total/NA	Solid	8015B NM	63096
890-5315-9	BH23-28 2'	Total/NA	Solid	8015B NM	63096
MB 880-63096/1-A	Method Blank	Total/NA	Solid	8015B NM	63096
LCS 880-63096/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63096
LCSD 880-63096/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63096
890-5315-1 MS	BH23-25 0'	Total/NA	Solid	8015B NM	63096
890-5315-1 MSD	BH23-25 0'	Total/NA	Solid	8015B NM	63096

HPLC/IC

Leach Batch: 63065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Soluble	Solid	DI Leach	
890-5315-2	BH23-25 2'	Soluble	Solid	DI Leach	
890-5315-3	BH23-26 0'	Soluble	Solid	DI Leach	
890-5315-4	BH23-26 2'	Soluble	Solid	DI Leach	
890-5315-5	BH23-27 4'	Soluble	Solid	DI Leach	
890-5315-6	BH23-27 0'	Soluble	Solid	DI Leach	
890-5315-7	BH23-27 2'	Soluble	Solid	DI Leach	
890-5315-8	BH23-28 0'	Soluble	Solid	DI Leach	
890-5315-9	BH23-28 2'	Soluble	Solid	DI Leach	
MB 880-63065/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63065/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63065/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5315-1 MS	BH23-25 0'	Soluble	Solid	DI Leach	
890-5315-1 MSD	BH23-25 0'	Soluble	Solid	DI Leach	

Analysis Batch: 63237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-1	BH23-25 0'	Soluble	Solid	300.0	63065

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

HPLC/IC (Continued)

Analysis Batch: 63237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5315-2	BH23-25 2'	Soluble	Solid	300.0	63065
890-5315-3	BH23-26 0'	Soluble	Solid	300.0	63065
890-5315-4	BH23-26 2'	Soluble	Solid	300.0	63065
890-5315-5	BH23-27 4'	Soluble	Solid	300.0	63065
890-5315-6	BH23-27 0'	Soluble	Solid	300.0	63065
890-5315-7	BH23-27 2'	Soluble	Solid	300.0	63065
890-5315-8	BH23-28 0'	Soluble	Solid	300.0	63065
890-5315-9	BH23-28 2'	Soluble	Solid	300.0	63065
MB 880-63065/1-A	Method Blank	Soluble	Solid	300.0	63065
LCS 880-63065/2-A	Lab Control Sample	Soluble	Solid	300.0	63065
LCSD 880-63065/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63065
890-5315-1 MS	BH23-25 0'	Soluble	Solid	300.0	63065
890-5315-1 MSD	BH23-25 0'	Soluble	Solid	300.0	63065

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-25 0'

Lab Sample ID: 890-5315-1
Matrix: Solid
Date Collected: 09/19/23 10:34
Date Received: 09/21/23 08:25

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	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 12:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 12:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 11:10	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 03:53	CH	EET MID

Client Sample ID: BH23-25 2'

Lab Sample ID: 890-5315-2
Matrix: Solid
Date Collected: 09/19/23 10:43
Date Received: 09/21/23 08:25

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	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 12:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 12:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 12:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 04:11	CH	EET MID

Client Sample ID: BH23-26 0'

Lab Sample ID: 890-5315-3
Matrix: Solid
Date Collected: 09/19/23 11:59
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 12:35	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 04:16	CH	EET MID

Client Sample ID: BH23-26 2'

Lab Sample ID: 890-5315-4
Matrix: Solid
Date Collected: 09/19/23 12:02
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 13:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 13:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 12:56	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-26 2'

Lab Sample ID: 890-5315-4
Matrix: Solid
Date Collected: 09/19/23 12:02
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 04:34	CH	EET MID

Client Sample ID: BH23-27 4'

Lab Sample ID: 890-5315-5
Matrix: Solid
Date Collected: 09/19/23 11:32
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 13:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 13:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 13:18	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63237	09/26/23 04:40	CH	EET MID

Client Sample ID: BH23-27 0'

Lab Sample ID: 890-5315-6
Matrix: Solid
Date Collected: 09/19/23 11:39
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 14:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 14:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 13:39	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 04:46	CH	EET MID

Client Sample ID: BH23-27 2'

Lab Sample ID: 890-5315-7
Matrix: Solid
Date Collected: 09/19/23 11:45
Date Received: 09/21/23 08:25

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	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 14:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 14:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 14:00	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 04:51	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Client Sample ID: BH23-28 0'

Lab Sample ID: 890-5315-8
Matrix: Solid
Date Collected: 09/19/23 11:13
Date Received: 09/21/23 08:25

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	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 15:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 14:22	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 04:57	CH	EET MID

Client Sample ID: BH23-28 2'

Lab Sample ID: 890-5315-9
Matrix: Solid
Date Collected: 09/19/23 11:23
Date Received: 09/21/23 08:25

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	63094	09/22/23 14:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63185	09/25/23 15:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63348	09/25/23 15:43	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	63096	09/22/23 14:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63134	09/23/23 14:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 05:03	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5315-1
SDG: Mobley

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5315-1	BH23-25 0'	Solid	09/19/23 10:34	09/21/23 08:25	0'
890-5315-2	BH23-25 2'	Solid	09/19/23 10:43	09/21/23 08:25	2'
890-5315-3	BH23-26 0'	Solid	09/19/23 11:59	09/21/23 08:25	0'
890-5315-4	BH23-26 2'	Solid	09/19/23 12:02	09/21/23 08:25	2'
890-5315-5	BH23-27 4'	Solid	09/19/23 11:32	09/21/23 08:25	4'
890-5315-6	BH23-27 0'	Solid	09/19/23 11:39	09/21/23 08:25	0'
890-5315-7	BH23-27 2'	Solid	09/19/23 11:45	09/21/23 08:25	2'
890-5315-8	BH23-28 0'	Solid	09/19/23 11:13	09/21/23 08:25	0'
890-5315-9	BH23-28 2'	Solid	09/19/23 11:23	09/21/23 08:25	2'

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

Chain of Custody

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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 _____ of _____

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

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:	Mobley Water Recycling	Turn Around	
Project Number:	236-04909	☑ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	9.29.23
Sampler's Name:	Jesus Valverde Costa	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:		TM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:		0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:		2.6
Total Containers:		Corrected Temperature:		2.4

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	BTEX	TPH 8015 D	Cl
BH23-25 0'	Soil	9.19.23	10:34	0		1				
BH23-25 2'			10:43	2		1				
BH23-26 0'			11:59	0						
BH23-26 2'			12:02	2						
BH23-27 4'			11:32	02						
BH23-27 0'			11:39	2						
BH23-27 2'			11:45	4						
BH23-28 0'			11:03	0						
BH23-28 2'			11:23	2						

890-5315 Chain of Custody

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/21 825	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc Jesus Valverde Costafillo at dcostafillo@verdex.ca.

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5315-1
SDG Number: Mobley

Login Number: 5315
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5315-1
SDG Number: Mobley

Login Number: 5315
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/22/23 10:54 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

Mobley Water Recycling
SDG NUMBER Mobley

JOB NUMBER

890-5314-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/12/2025 9:46:11 AM

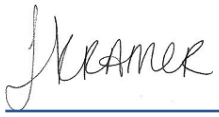
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/28/2023 4:14:51 PM

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

Client: Vertex
Project/Site: Mobley Water Recycling

Laboratory Job ID: 890-5314-1
SDG: Mobley

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 20
QC Sample Results 22
QC Association Summary 27
Lab Chronicle 31
Certification Summary 37
Method Summary 38
Sample Summary 39
Chain of Custody 40
Receipt Checklists 42

Definitions/Glossary

Client: Vertex Job ID: 890-5314-1
Project/Site: Mobley Water Recycling SDG: Mobley

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Job ID: 890-5314-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5314-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/21/2023 8:25 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 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-29 0' (890-5314-1), BH23-29 2' (890-5314-2), BH23-30 0' (890-5314-3), BH23-30 2' (890-5314-4), BH23-30 4' (890-5314-5), BH23-31 0' (890-5314-6), BH23-31 2' (890-5314-7), BH23-32 0' (890-5314-8), BH23-32 2' (890-5314-9), BH23-33 0' (890-5314-10), BH23-33 2' (890-5314-11), BH23-34 0' (890-5314-12), BH23-34 2' (890-5314-13), BH23-34 4' (890-5314-14), BH23-35 0' (890-5314-15), BH23-35 2' (890-5314-16), BH23-36 0' (890-5314-17) and BH23-36 2' (890-5314-18).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23-30 0' (890-5314-3), BH23-30 2' (890-5314-4), BH23-31 0' (890-5314-6), BH23-31 2' (890-5314-7), BH23-32 0' (890-5314-8), BH23-32 2' (890-5314-9), BH23-33 0' (890-5314-10), BH23-33 2' (890-5314-11), BH23-34 0' (890-5314-12), BH23-34 2' (890-5314-13), BH23-34 4' (890-5314-14), BH23-35 0' (890-5314-15), BH23-35 2' (890-5314-16), BH23-36 0' (890-5314-17), BH23-36 2' (890-5314-18), (CCV 880-63317/2), (CCV 880-63317/20) and (890-5314-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63018 and analytical batch 880-63317 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63317 recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-63317/51).

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 880-63095 and analytical batch 880-63030 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-63030/31), (CCV 880-63030/47), (CCV 880-63030/58) and (LCS 880-63095/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-29 2' (890-5314-2), BH23-30 0' (890-5314-3), BH23-30 2' (890-5314-4), BH23-30 4' (890-5314-5), BH23-31 0' (890-5314-6), BH23-31 2' (890-5314-7), BH23-32 0' (890-5314-8), BH23-33 0' (890-5314-10), BH23-33 2' (890-5314-11), BH23-34 0' (890-5314-12), BH23-34 2' (890-5314-13), BH23-34 4' (890-5314-14), BH23-35 0' (890-5314-15), BH23-35 2' (890-5314-16), BH23-36 0' (890-5314-17), BH23-36 2' (890-5314-18),

Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Job ID: 890-5314-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

(890-5314-A-1-F MS) and (890-5314-A-1-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63095 and analytical batch 880-63030 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-63065 and 880-63065 and analytical batch 880-63237 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-29 0'

Date Collected: 09/20/23 09:27
Date Received: 09/21/23 08:25
Sample Depth: 0'

Lab Sample ID: 890-5314-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 04:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 04:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/22/23 14:53*	*09/27/23 04:47*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/22/23 14:53*	*09/27/23 04:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/27/23 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/22/23 14:56	09/22/23 20:32	1
Diesel Range Organics (Over C10-C28)	<50.1	U F1	50.1		mg/Kg		09/22/23 14:56	09/22/23 20:32	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/22/23 14:56	09/22/23 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*09/22/23 14:56*	*09/22/23 20:32*	*1*
o-Terphenyl	*115*		*70 - 130*	*09/22/23 14:56*	*09/22/23 20:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**		5.04		mg/Kg			09/25/23 21:28	1

Client Sample ID: BH23-29 2'

Date Collected: 09/20/23 09:32
Date Received: 09/21/23 08:25
Sample Depth: 2

Lab Sample ID: 890-5314-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 05:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 05:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 05:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/23 14:53	09/27/23 05:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/23 14:53	09/27/23 05:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*09/22/23 14:53*	*09/27/23 05:13*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/22/23 14:53*	*09/27/23 05:13*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-29 2'

Lab Sample ID: 890-5314-2
Matrix: Solid
Date Collected: 09/20/23 09:32
Date Received: 09/21/23 08:25
Sample Depth: 2

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/27/23 05:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/22/23 21:36	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/22/23 21:36	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/22/23 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 21:36*	*1*
o-Terphenyl	*124*		*70 - 130*	*09/22/23 14:56*	*09/22/23 21:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**119**		4.97		mg/Kg			09/25/23 21:45	1

Client Sample ID: BH23-30 0'

Lab Sample ID: 890-5314-3
Matrix: Solid
Date Collected: 09/20/23 09:36
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 05:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 05:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 05:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 05:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 05:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 05:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*139*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 05:38*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/22/23 14:53*	*09/27/23 05:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 05:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 21:57	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 21:57	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 21:57*	*1*
o-Terphenyl	*123*		*70 - 130*	*09/22/23 14:56*	*09/22/23 21:57*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-30 0'

Lab Sample ID: 890-5314-3
Matrix: Solid
Date Collected: 09/20/23 09:36
Date Received: 09/21/23 08:25
Sample Depth: 0'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7420		99.6		mg/Kg			09/25/23 21:51	20

Client Sample ID: BH23-30 2'

Lab Sample ID: 890-5314-4
Matrix: Solid
Date Collected: 09/20/23 09:48
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 06:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 06:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 06:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 06:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 06:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 06:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 06:04*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*09/22/23 14:53*	*09/27/23 06:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/27/23 06:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/22/23 22:19	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/22/23 22:19	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/22/23 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 22:19*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 22:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8490		100		mg/Kg			09/25/23 21:57	20

Client Sample ID: BH23-30 4'

Lab Sample ID: 890-5314-5
Matrix: Solid
Date Collected: 09/20/23 10:00
Date Received: 09/21/23 08:25
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 06:29	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 06:29	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 06:29	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 06:29	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-30 4'

Lab Sample ID: 890-5314-5
Matrix: Solid
Date Collected: 09/20/23 10:00
Date Received: 09/21/23 08:25
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 06:29	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*09/22/23 14:53*	*09/27/23 06:29*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*09/22/23 14:53*	*09/27/23 06:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/27/23 06:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/22/23 22:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/22/23 22:40	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/22/23 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 22:40*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/22/23 14:56*	*09/22/23 22:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**416**		5.04		mg/Kg			09/25/23 22:03	1

Client Sample ID: BH23-31 0'

Lab Sample ID: 890-5314-6
Matrix: Solid
Date Collected: 09/20/23 10:03
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/22/23 14:53	09/27/23 06:55	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/22/23 14:53	09/27/23 06:55	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/22/23 14:53	09/27/23 06:55	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/22/23 14:53	09/27/23 06:55	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/22/23 14:53	09/27/23 06:55	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/22/23 14:53	09/27/23 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 06:55*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*09/22/23 14:53*	*09/27/23 06:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/27/23 06:55	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-31 0'

Lab Sample ID: 890-5314-6
Matrix: Solid
Date Collected: 09/20/23 10:03
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 23:01	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 23:01	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/22/23 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 23:01*	*1*
o-Terphenyl	*120*		*70 - 130*	*09/22/23 14:56*	*09/22/23 23:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**107**		5.04		mg/Kg			09/25/23 22:08	1

Client Sample ID: BH23-31 2'

Lab Sample ID: 890-5314-7
Matrix: Solid
Date Collected: 09/20/23 10:13
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 07:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 07:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 07:21*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/22/23 14:53*	*09/27/23 07:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		09/22/23 14:56	09/22/23 23:22	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/22/23 14:56	09/22/23 23:22	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/22/23 14:56	09/22/23 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 23:22*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 23:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**104**		5.00		mg/Kg			09/25/23 22:14	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-32 0'

Lab Sample ID: 890-5314-8
Matrix: Solid
Date Collected: 09/20/23 10:15
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 07:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 07:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*168*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 07:47*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*09/22/23 14:53*	*09/27/23 07:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 07:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/22/23 23:43	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/22/23 23:43	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/22/23 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 23:43*	*1*
o-Terphenyl	*121*		*70 - 130*	*09/22/23 14:56*	*09/22/23 23:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**103**		4.99		mg/Kg			09/25/23 22:20	1

Client Sample ID: BH23-32 2'

Lab Sample ID: 890-5314-9
Matrix: Solid
Date Collected: 09/20/23 10:17
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 08:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 08:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 08:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 08:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 08:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 08:13*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/22/23 14:53*	*09/27/23 08:13*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-32 2'

Lab Sample ID: 890-5314-9
Matrix: Solid
Date Collected: 09/20/23 10:17
Date Received: 09/21/23 08:25
Sample Depth: 2'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/27/23 08:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/23/23 00:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/23/23 00:04	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/22/23 14:56	09/23/23 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*09/22/23 14:56*	*09/23/23 00:04*	*1*
o-Terphenyl	*120*		*70 - 130*	*09/22/23 14:56*	*09/23/23 00:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**563**	**F1**	24.8		mg/Kg			09/26/23 02:31	5

Client Sample ID: BH23-33 0'

Lab Sample ID: 890-5314-10
Matrix: Solid
Date Collected: 09/20/23 10:42
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 08:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 08:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 08:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 08:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 08:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 08:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 08:48*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/22/23 14:53*	*09/27/23 08:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 08:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 00:25	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 00:25	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 00:25*	*1*
o-Terphenyl	*122*		*70 - 130*	*09/22/23 14:56*	*09/23/23 00:25*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-33 0'

Lab Sample ID: 890-5314-10
Matrix: Solid
Date Collected: 09/20/23 10:42
Date Received: 09/21/23 08:25
Sample Depth: 0'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		25.0		mg/Kg			09/26/23 02:49	5

Client Sample ID: BH23-33 2'

Lab Sample ID: 890-5314-11
Matrix: Solid
Date Collected: 09/20/23 10:48
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 10:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 10:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 10:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 10:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 10:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 10:31*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*09/22/23 14:53*	*09/27/23 10:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 10:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 01:07	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 01:07	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/22/23 14:56	09/23/23 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 01:07*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 01:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	246		25.2		mg/Kg			09/26/23 02:55	5

Client Sample ID: BH23-34 0'

Lab Sample ID: 890-5314-12
Matrix: Solid
Date Collected: 09/20/23 10:52
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 10:58	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 10:58	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 10:58	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 10:58	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-34 0'

Lab Sample ID: 890-5314-12
Matrix: Solid
Date Collected: 09/20/23 10:52
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 10:58	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 10:58*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*09/22/23 14:53*	*09/27/23 10:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/27/23 10:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 01:28	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 01:28	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 01:28*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/22/23 14:56*	*09/23/23 01:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6870**		50.2		mg/Kg			09/26/23 03:01	10

Client Sample ID: BH23-34 2'

Lab Sample ID: 890-5314-13
Matrix: Solid
Date Collected: 09/20/23 11:00
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 11:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 11:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 11:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 11:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/23 14:53	09/27/23 11:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/23 14:53	09/27/23 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 11:24*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*09/22/23 14:53*	*09/27/23 11:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/27/23 11:24	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-34 2'

Lab Sample ID: 890-5314-13
Matrix: Solid
Date Collected: 09/20/23 11:00
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/23/23 01:49	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/23/23 01:49	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/22/23 14:56	09/23/23 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 01:49*	*1*
o-Terphenyl	*124*		*70 - 130*	*09/22/23 14:56*	*09/23/23 01:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4500**		50.2		mg/Kg			09/26/23 03:06	10

Client Sample ID: BH23-34 4'

Lab Sample ID: 890-5314-14
Matrix: Solid
Date Collected: 09/20/23 11:10
Date Received: 09/21/23 08:25
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 11:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 11:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 11:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 11:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 11:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*169*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 11:50*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*09/22/23 14:53*	*09/27/23 11:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 11:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:11	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 02:11*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**319**		24.9		mg/Kg			09/26/23 03:24	5

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-35 0'

Lab Sample ID: 890-5314-15
Matrix: Solid
Date Collected: 09/20/23 11:13
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 12:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 12:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 12:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 12:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 12:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 12:16*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*09/22/23 14:53*	*09/27/23 12:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 12:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/23/23 02:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/23/23 02:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/22/23 14:56	09/23/23 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 02:31*	*1*
o-Terphenyl	*125*		*70 - 130*	*09/22/23 14:56*	*09/23/23 02:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.4**		4.97		mg/Kg			09/26/23 03:30	1

Client Sample ID: BH23-35 2'

Lab Sample ID: 890-5314-16
Matrix: Solid
Date Collected: 09/20/23 11:17
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 12:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 12:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 12:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 12:42*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/22/23 14:53*	*09/27/23 12:42*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-35 2'

Lab Sample ID: 890-5314-16
Matrix: Solid
Date Collected: 09/20/23 11:17
Date Received: 09/21/23 08:25
Sample Depth: 2'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/27/23 12:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:52	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:52	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/22/23 14:56	09/23/23 02:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 02:52*	*1*
o-Terphenyl	*122*		*70 - 130*	*09/22/23 14:56*	*09/23/23 02:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**187**		25.2		mg/Kg			09/26/23 03:36	5

Client Sample ID: BH23-36 0'

Lab Sample ID: 890-5314-17
Matrix: Solid
Date Collected: 09/20/23 11:23
Date Received: 09/21/23 08:25
Sample Depth: 0'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 13:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 13:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 13:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 13:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/23 14:53	09/27/23 13:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/23 14:53	09/27/23 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 13:08*	*1*
1,4-Difluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 13:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/27/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 03:14	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 03:14	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		09/22/23 14:56	09/23/23 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 03:14*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 03:14*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-36 0'

Lab Sample ID: 890-5314-17
Matrix: Solid
Date Collected: 09/20/23 11:23
Date Received: 09/21/23 08:25
Sample Depth: 0'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		5.04		mg/Kg			09/26/23 03:42	1

Client Sample ID: BH23-36 2'

Lab Sample ID: 890-5314-18
Matrix: Solid
Date Collected: 09/20/23 11:26
Date Received: 09/21/23 08:25
Sample Depth: 2'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 13:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 13:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 13:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 13:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/23 14:53	09/27/23 13:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*09/22/23 14:53*	*09/27/23 13:34*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*09/22/23 14:53*	*09/27/23 13:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/27/23 13:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/22/23 14:56	09/23/23 03:35	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/22/23 14:56	09/23/23 03:35	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/22/23 14:56	09/23/23 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/23/23 03:35*	*1*
o-Terphenyl	*130*		*70 - 130*	*09/22/23 14:56*	*09/23/23 03:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		4.99		mg/Kg			09/26/23 03:47	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-5314-1	BH23-29 0'	116	96
890-5314-1 MS	BH23-29 0'	90	111
890-5314-1 MSD	BH23-29 0'	146 S1+	103
890-5314-2	BH23-29 2'	129	92
890-5314-3	BH23-30 0'	139 S1+	110
890-5314-4	BH23-30 2'	141 S1+	88
890-5314-5	BH23-30 4'	130	103
890-5314-6	BH23-31 0'	138 S1+	85
890-5314-7	BH23-31 2'	140 S1+	109
890-5314-8	BH23-32 0'	168 S1+	118
890-5314-9	BH23-32 2'	148 S1+	93
890-5314-10	BH23-33 0'	140 S1+	109
890-5314-11	BH23-33 2'	143 S1+	94
890-5314-12	BH23-34 0'	149 S1+	120
890-5314-13	BH23-34 2'	132 S1+	105
890-5314-14	BH23-34 4'	169 S1+	120
890-5314-15	BH23-35 0'	153 S1+	118
890-5314-16	BH23-35 2'	135 S1+	92
890-5314-17	BH23-36 0'	145 S1+	131 S1+
890-5314-18	BH23-36 2'	144 S1+	109
LCS 880-63093/1-A	Lab Control Sample	126	105
LCSD 880-63093/2-A	Lab Control Sample Dup	116	92
MB 880-63018/5-A	Method Blank	69 S1-	79
MB 880-63093/5-A	Method Blank	78	101

Percent Surrogate Recovery (Acceptance Limits)

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**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5314-1	BH23-29 0'	125	115
890-5314-1 MS	BH23-29 0'	152 S1+	126
890-5314-1 MSD	BH23-29 0'	150 S1+	124
890-5314-2	BH23-29 2'	135 S1+	124
890-5314-3	BH23-30 0'	133 S1+	123
890-5314-4	BH23-30 2'	139 S1+	131 S1+
890-5314-5	BH23-30 4'	135 S1+	125
890-5314-6	BH23-31 0'	132 S1+	120
890-5314-7	BH23-31 2'	142 S1+	135 S1+
890-5314-8	BH23-32 0'	132 S1+	121
890-5314-9	BH23-32 2'	130	120
890-5314-10	BH23-33 0'	133 S1+	122
890-5314-11	BH23-33 2'	148 S1+	133 S1+
890-5314-12	BH23-34 0'	135 S1+	125
890-5314-13	BH23-34 2'	131 S1+	124

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Summary

Client: Vertex Job ID: 890-5314-1
Project/Site: Mobley Water Recycling SDG: Mobley

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-5314-14	BH23-34 4'	144 S1+	133 S1+										
890-5314-15	BH23-35 0'	135 S1+	125										
890-5314-16	BH23-35 2'	131 S1+	122										
890-5314-17	BH23-36 0'	148 S1+	134 S1+										
890-5314-18	BH23-36 2'	139 S1+	130										
LCS 880-63095/2-A	Lab Control Sample	112	150 S1+										
LCSD 880-63095/3-A	Lab Control Sample Dup	104	110										
MB 880-63095/1-A	Method Blank	201 S1+	198 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63018/5-A
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63018

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/23 16:34	09/26/23 14:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/23 16:34	09/26/23 14:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/23 16:34	09/26/23 14:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/21/23 16:34	09/26/23 14:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/21/23 16:34	09/26/23 14:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/23 16:34	09/26/23 14:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/21/23 16:34*	*09/26/23 14:50*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*09/21/23 16:34*	*09/26/23 14:50*	*1*

Lab Sample ID: MB 880-63093/5-A
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63093

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/22/23 14:53	09/27/23 04:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/22/23 14:53	09/27/23 04:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/23 14:53	09/27/23 04:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*09/22/23 14:53*	*09/27/23 04:21*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*09/22/23 14:53*	*09/27/23 04:21*	*1*

Lab Sample ID: LCS 880-63093/1-A
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63093

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1022		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1086		mg/Kg		109	70 - 130
Toluene	0.100	0.1116		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2164		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1014		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-63093/2-A
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63093

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09848		mg/Kg		98	70 - 130	4	35

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

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

Lab Sample ID: LCSD 880-63093/2-A
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63093

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene			0.100	0.1032		mg/Kg		103	70 - 130	5	35
Toluene			0.100	0.1088		mg/Kg		109	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2043		mg/Kg		102	70 - 130	6	35
o-Xylene			0.100	0.1031		mg/Kg		103	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-5314-1 MS
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: BH23-29 0'
Prep Type: Total/NA
Prep Batch: 63093

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.1135		mg/Kg		113	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.1155		mg/Kg		114	70 - 130
Toluene	<0.00200	U	0.0998	0.1190		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2255		mg/Kg		113	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1108		mg/Kg		111	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 890-5314-1 MSD
Matrix: Solid
Analysis Batch: 63317

Client Sample ID: BH23-29 0'
Prep Type: Total/NA
Prep Batch: 63093

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.1229		mg/Kg		124	70 - 130	8	35
Ethylbenzene	<0.00200	U	0.0990	0.1079		mg/Kg		107	70 - 130	7	35
Toluene	<0.00200	U	0.0990	0.1162		mg/Kg		117	70 - 130	2	35
m-Xylene & p-Xylene	<0.00399	U	0.198	0.2125		mg/Kg		107	70 - 130	6	35
o-Xylene	<0.00200	U	0.0990	0.1110		mg/Kg		112	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-63095/1-A
Matrix: Solid
Analysis Batch: 63030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/22/23 14:56	09/22/23 19:27	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

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

Lab Sample ID: MB 880-63095/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63095**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/22/23 14:56	09/22/23 19:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/22/23 14:56	09/22/23 19:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*201*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 19:27*	*1*
o-Terphenyl	*198*	*S1+*	*70 - 130*	*09/22/23 14:56*	*09/22/23 19:27*	*1*

Lab Sample ID: LCS 880-63095/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63095**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	935.8		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	982.0		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*150*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-63095/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63095**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	934.6		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	985.5		mg/Kg		99	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*110*		*70 - 130*

Lab Sample ID: 890-5314-1 MS — **Client Sample ID: BH23-29 0'**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 63030 — **Prep Batch: 63095**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	995	961.9		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	1415	F1	mg/Kg		141	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*152*	*S1+*	*70 - 130*
o-Terphenyl	*126*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

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

Lab Sample ID: 890-5314-1 MSD
Matrix: Solid
Analysis Batch: 63030

Client Sample ID: BH23-29 0'
Prep Type: Total/NA
Prep Batch: 63095

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	995	940.5		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	1411	F1	mg/Kg		140	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*150*	*S1+*	*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63064/1-A
Matrix: Solid
Analysis Batch: 63234

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		mg/Kg			09/25/23 19:25	1

Lab Sample ID: LCS 880-63064/2-A
Matrix: Solid
Analysis Batch: 63234

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.2		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-63064/3-A
Matrix: Solid
Analysis Batch: 63234

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	246.5		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-5311-A-7-C MS
Matrix: Solid
Analysis Batch: 63234

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	97.7		250	361.9		mg/Kg		106	90 - 110

Lab Sample ID: 890-5311-A-7-D MSD
Matrix: Solid
Analysis Batch: 63234

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	97.7		250	362.6		mg/Kg		106	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-63065/1-A
Matrix: Solid
Analysis Batch: 63237

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		mg/Kg			09/26/23 02:14	1

Lab Sample ID: LCS 880-63065/2-A
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	249.9		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-63065/3-A
Matrix: Solid
Analysis Batch: 63237

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	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-5314-9 MS
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: BH23-32 2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	563	F1	1240	1417	F1	mg/Kg		69	90 - 110		

Lab Sample ID: 890-5314-9 MSD
Matrix: Solid
Analysis Batch: 63237

Client Sample ID: BH23-32 2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	563	F1	1240	1418	F1	mg/Kg		69	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

GC VOA

Prep Batch: 63018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63018/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 63093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Total/NA	Solid	5035	
890-5314-2	BH23-29 2'	Total/NA	Solid	5035	
890-5314-3	BH23-30 0'	Total/NA	Solid	5035	
890-5314-4	BH23-30 2'	Total/NA	Solid	5035	
890-5314-5	BH23-30 4'	Total/NA	Solid	5035	
890-5314-6	BH23-31 0'	Total/NA	Solid	5035	
890-5314-7	BH23-31 2'	Total/NA	Solid	5035	
890-5314-8	BH23-32 0'	Total/NA	Solid	5035	
890-5314-9	BH23-32 2'	Total/NA	Solid	5035	
890-5314-10	BH23-33 0'	Total/NA	Solid	5035	
890-5314-11	BH23-33 2'	Total/NA	Solid	5035	
890-5314-12	BH23-34 0'	Total/NA	Solid	5035	
890-5314-13	BH23-34 2'	Total/NA	Solid	5035	
890-5314-14	BH23-34 4'	Total/NA	Solid	5035	
890-5314-15	BH23-35 0'	Total/NA	Solid	5035	
890-5314-16	BH23-35 2'	Total/NA	Solid	5035	
890-5314-17	BH23-36 0'	Total/NA	Solid	5035	
890-5314-18	BH23-36 2'	Total/NA	Solid	5035	
MB 880-63093/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63093/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63093/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5314-1 MS	BH23-29 0'	Total/NA	Solid	5035	
890-5314-1 MSD	BH23-29 0'	Total/NA	Solid	5035	

Analysis Batch: 63317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Total/NA	Solid	8021B	63093
890-5314-2	BH23-29 2'	Total/NA	Solid	8021B	63093
890-5314-3	BH23-30 0'	Total/NA	Solid	8021B	63093
890-5314-4	BH23-30 2'	Total/NA	Solid	8021B	63093
890-5314-5	BH23-30 4'	Total/NA	Solid	8021B	63093
890-5314-6	BH23-31 0'	Total/NA	Solid	8021B	63093
890-5314-7	BH23-31 2'	Total/NA	Solid	8021B	63093
890-5314-8	BH23-32 0'	Total/NA	Solid	8021B	63093
890-5314-9	BH23-32 2'	Total/NA	Solid	8021B	63093
890-5314-10	BH23-33 0'	Total/NA	Solid	8021B	63093
890-5314-11	BH23-33 2'	Total/NA	Solid	8021B	63093
890-5314-12	BH23-34 0'	Total/NA	Solid	8021B	63093
890-5314-13	BH23-34 2'	Total/NA	Solid	8021B	63093
890-5314-14	BH23-34 4'	Total/NA	Solid	8021B	63093
890-5314-15	BH23-35 0'	Total/NA	Solid	8021B	63093
890-5314-16	BH23-35 2'	Total/NA	Solid	8021B	63093
890-5314-17	BH23-36 0'	Total/NA	Solid	8021B	63093
890-5314-18	BH23-36 2'	Total/NA	Solid	8021B	63093
MB 880-63018/5-A	Method Blank	Total/NA	Solid	8021B	63018
MB 880-63093/5-A	Method Blank	Total/NA	Solid	8021B	63093
LCS 880-63093/1-A	Lab Control Sample	Total/NA	Solid	8021B	63093

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

GC VOA (Continued)

Analysis Batch: 63317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-63093/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63093
890-5314-1 MS	BH23-29 0'	Total/NA	Solid	8021B	63093
890-5314-1 MSD	BH23-29 0'	Total/NA	Solid	8021B	63093

Analysis Batch: 63448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Total/NA	Solid	Total BTEX	
890-5314-2	BH23-29 2'	Total/NA	Solid	Total BTEX	
890-5314-3	BH23-30 0'	Total/NA	Solid	Total BTEX	
890-5314-4	BH23-30 2'	Total/NA	Solid	Total BTEX	
890-5314-5	BH23-30 4'	Total/NA	Solid	Total BTEX	
890-5314-6	BH23-31 0'	Total/NA	Solid	Total BTEX	
890-5314-7	BH23-31 2'	Total/NA	Solid	Total BTEX	
890-5314-8	BH23-32 0'	Total/NA	Solid	Total BTEX	
890-5314-9	BH23-32 2'	Total/NA	Solid	Total BTEX	
890-5314-10	BH23-33 0'	Total/NA	Solid	Total BTEX	
890-5314-11	BH23-33 2'	Total/NA	Solid	Total BTEX	
890-5314-12	BH23-34 0'	Total/NA	Solid	Total BTEX	
890-5314-13	BH23-34 2'	Total/NA	Solid	Total BTEX	
890-5314-14	BH23-34 4'	Total/NA	Solid	Total BTEX	
890-5314-15	BH23-35 0'	Total/NA	Solid	Total BTEX	
890-5314-16	BH23-35 2'	Total/NA	Solid	Total BTEX	
890-5314-17	BH23-36 0'	Total/NA	Solid	Total BTEX	
890-5314-18	BH23-36 2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 63030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Total/NA	Solid	8015B NM	63095
890-5314-2	BH23-29 2'	Total/NA	Solid	8015B NM	63095
890-5314-3	BH23-30 0'	Total/NA	Solid	8015B NM	63095
890-5314-4	BH23-30 2'	Total/NA	Solid	8015B NM	63095
890-5314-5	BH23-30 4'	Total/NA	Solid	8015B NM	63095
890-5314-6	BH23-31 0'	Total/NA	Solid	8015B NM	63095
890-5314-7	BH23-31 2'	Total/NA	Solid	8015B NM	63095
890-5314-8	BH23-32 0'	Total/NA	Solid	8015B NM	63095
890-5314-9	BH23-32 2'	Total/NA	Solid	8015B NM	63095
890-5314-10	BH23-33 0'	Total/NA	Solid	8015B NM	63095
890-5314-11	BH23-33 2'	Total/NA	Solid	8015B NM	63095
890-5314-12	BH23-34 0'	Total/NA	Solid	8015B NM	63095
890-5314-13	BH23-34 2'	Total/NA	Solid	8015B NM	63095
890-5314-14	BH23-34 4'	Total/NA	Solid	8015B NM	63095
890-5314-15	BH23-35 0'	Total/NA	Solid	8015B NM	63095
890-5314-16	BH23-35 2'	Total/NA	Solid	8015B NM	63095
890-5314-17	BH23-36 0'	Total/NA	Solid	8015B NM	63095
890-5314-18	BH23-36 2'	Total/NA	Solid	8015B NM	63095
MB 880-63095/1-A	Method Blank	Total/NA	Solid	8015B NM	63095
LCS 880-63095/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63095
LCSD 880-63095/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63095
890-5314-1 MS	BH23-29 0'	Total/NA	Solid	8015B NM	63095

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

GC Semi VOA (Continued)

Analysis Batch: 63030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1 MSD	BH23-29 0'	Total/NA	Solid	8015B NM	63095

Prep Batch: 63095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Total/NA	Solid	8015NM Prep	
890-5314-2	BH23-29 2'	Total/NA	Solid	8015NM Prep	
890-5314-3	BH23-30 0'	Total/NA	Solid	8015NM Prep	
890-5314-4	BH23-30 2'	Total/NA	Solid	8015NM Prep	
890-5314-5	BH23-30 4'	Total/NA	Solid	8015NM Prep	
890-5314-6	BH23-31 0'	Total/NA	Solid	8015NM Prep	
890-5314-7	BH23-31 2'	Total/NA	Solid	8015NM Prep	
890-5314-8	BH23-32 0'	Total/NA	Solid	8015NM Prep	
890-5314-9	BH23-32 2'	Total/NA	Solid	8015NM Prep	
890-5314-10	BH23-33 0'	Total/NA	Solid	8015NM Prep	
890-5314-11	BH23-33 2'	Total/NA	Solid	8015NM Prep	
890-5314-12	BH23-34 0'	Total/NA	Solid	8015NM Prep	
890-5314-13	BH23-34 2'	Total/NA	Solid	8015NM Prep	
890-5314-14	BH23-34 4'	Total/NA	Solid	8015NM Prep	
890-5314-15	BH23-35 0'	Total/NA	Solid	8015NM Prep	
890-5314-16	BH23-35 2'	Total/NA	Solid	8015NM Prep	
890-5314-17	BH23-36 0'	Total/NA	Solid	8015NM Prep	
890-5314-18	BH23-36 2'	Total/NA	Solid	8015NM Prep	
MB 880-63095/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63095/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63095/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5314-1 MS	BH23-29 0'	Total/NA	Solid	8015NM Prep	
890-5314-1 MSD	BH23-29 0'	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 63064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Soluble	Solid	DI Leach	
890-5314-2	BH23-29 2'	Soluble	Solid	DI Leach	
890-5314-3	BH23-30 0'	Soluble	Solid	DI Leach	
890-5314-4	BH23-30 2'	Soluble	Solid	DI Leach	
890-5314-5	BH23-30 4'	Soluble	Solid	DI Leach	
890-5314-6	BH23-31 0'	Soluble	Solid	DI Leach	
890-5314-7	BH23-31 2'	Soluble	Solid	DI Leach	
890-5314-8	BH23-32 0'	Soluble	Solid	DI Leach	
MB 880-63064/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63064/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63064/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5311-A-7-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5311-A-7-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 63065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-9	BH23-32 2'	Soluble	Solid	DI Leach	
890-5314-10	BH23-33 0'	Soluble	Solid	DI Leach	
890-5314-11	BH23-33 2'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

HPLC/IC (Continued)

Leach Batch: 63065 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-12	BH23-34 0'	Soluble	Solid	DI Leach	
890-5314-13	BH23-34 2'	Soluble	Solid	DI Leach	
890-5314-14	BH23-34 4'	Soluble	Solid	DI Leach	
890-5314-15	BH23-35 0'	Soluble	Solid	DI Leach	
890-5314-16	BH23-35 2'	Soluble	Solid	DI Leach	
890-5314-17	BH23-36 0'	Soluble	Solid	DI Leach	
890-5314-18	BH23-36 2'	Soluble	Solid	DI Leach	
MB 880-63065/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63065/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63065/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5314-9 MS	BH23-32 2'	Soluble	Solid	DI Leach	
890-5314-9 MSD	BH23-32 2'	Soluble	Solid	DI Leach	

Analysis Batch: 63234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-1	BH23-29 0'	Soluble	Solid	300.0	63064
890-5314-2	BH23-29 2'	Soluble	Solid	300.0	63064
890-5314-3	BH23-30 0'	Soluble	Solid	300.0	63064
890-5314-4	BH23-30 2'	Soluble	Solid	300.0	63064
890-5314-5	BH23-30 4'	Soluble	Solid	300.0	63064
890-5314-6	BH23-31 0'	Soluble	Solid	300.0	63064
890-5314-7	BH23-31 2'	Soluble	Solid	300.0	63064
890-5314-8	BH23-32 0'	Soluble	Solid	300.0	63064
MB 880-63064/1-A	Method Blank	Soluble	Solid	300.0	63064
LCS 880-63064/2-A	Lab Control Sample	Soluble	Solid	300.0	63064
LCSD 880-63064/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63064
890-5311-A-7-C MS	Matrix Spike	Soluble	Solid	300.0	63064
890-5311-A-7-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63064

Analysis Batch: 63237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5314-9	BH23-32 2'	Soluble	Solid	300.0	63065
890-5314-10	BH23-33 0'	Soluble	Solid	300.0	63065
890-5314-11	BH23-33 2'	Soluble	Solid	300.0	63065
890-5314-12	BH23-34 0'	Soluble	Solid	300.0	63065
890-5314-13	BH23-34 2'	Soluble	Solid	300.0	63065
890-5314-14	BH23-34 4'	Soluble	Solid	300.0	63065
890-5314-15	BH23-35 0'	Soluble	Solid	300.0	63065
890-5314-16	BH23-35 2'	Soluble	Solid	300.0	63065
890-5314-17	BH23-36 0'	Soluble	Solid	300.0	63065
890-5314-18	BH23-36 2'	Soluble	Solid	300.0	63065
MB 880-63065/1-A	Method Blank	Soluble	Solid	300.0	63065
LCS 880-63065/2-A	Lab Control Sample	Soluble	Solid	300.0	63065
LCSD 880-63065/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63065
890-5314-9 MS	BH23-32 2'	Soluble	Solid	300.0	63065
890-5314-9 MSD	BH23-32 2'	Soluble	Solid	300.0	63065

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-29 0'

Lab Sample ID: 890-5314-1
Matrix: Solid
Date Collected: 09/20/23 09:27
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 04:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 04:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 20:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 21:28	CH	EET MID

Client Sample ID: BH23-29 2'

Lab Sample ID: 890-5314-2
Matrix: Solid
Date Collected: 09/20/23 09:32
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 05:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 05:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 21:36	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 21:45	CH	EET MID

Client Sample ID: BH23-30 0'

Lab Sample ID: 890-5314-3
Matrix: Solid
Date Collected: 09/20/23 09:36
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 05:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 05:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 21:57	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63234	09/25/23 21:51	CH	EET MID

Client Sample ID: BH23-30 2'

Lab Sample ID: 890-5314-4
Matrix: Solid
Date Collected: 09/20/23 09:48
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 06:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 06:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 22:19	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-30 2'

Lab Sample ID: 890-5314-4
Matrix: Solid
Date Collected: 09/20/23 09:48
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63234	09/25/23 21:57	CH	EET MID

Client Sample ID: BH23-30 4'

Lab Sample ID: 890-5314-5
Matrix: Solid
Date Collected: 09/20/23 10:00
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 06:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 06:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 22:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 22:03	CH	EET MID

Client Sample ID: BH23-31 0'

Lab Sample ID: 890-5314-6
Matrix: Solid
Date Collected: 09/20/23 10:03
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 06:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 06:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 23:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 22:08	CH	EET MID

Client Sample ID: BH23-31 2'

Lab Sample ID: 890-5314-7
Matrix: Solid
Date Collected: 09/20/23 10:13
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 07:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 07:21	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 23:22	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 22:14	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-32 0'

Lab Sample ID: 890-5314-8
Matrix: Solid
Date Collected: 09/20/23 10:15
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 07:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 07:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/22/23 23:43	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	63064	09/22/23 11:15	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63234	09/25/23 22:20	CH	EET MID

Client Sample ID: BH23-32 2'

Lab Sample ID: 890-5314-9
Matrix: Solid
Date Collected: 09/20/23 10:17
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 08:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 08:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 00:04	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 02:31	CH	EET MID

Client Sample ID: BH23-33 0'

Lab Sample ID: 890-5314-10
Matrix: Solid
Date Collected: 09/20/23 10:42
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 08:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 08:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 00:25	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 02:49	CH	EET MID

Client Sample ID: BH23-33 2'

Lab Sample ID: 890-5314-11
Matrix: Solid
Date Collected: 09/20/23 10:48
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 10:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 10:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 01:07	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-33 2'

Lab Sample ID: 890-5314-11
Matrix: Solid
Date Collected: 09/20/23 10:48
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 02:55	CH	EET MID

Client Sample ID: BH23-34 0'

Lab Sample ID: 890-5314-12
Matrix: Solid
Date Collected: 09/20/23 10:52
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 10:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 10:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 01:28	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63237	09/26/23 03:01	CH	EET MID

Client Sample ID: BH23-34 2'

Lab Sample ID: 890-5314-13
Matrix: Solid
Date Collected: 09/20/23 11:00
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 11:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 01:49	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63237	09/26/23 03:06	CH	EET MID

Client Sample ID: BH23-34 4'

Lab Sample ID: 890-5314-14
Matrix: Solid
Date Collected: 09/20/23 11:10
Date Received: 09/21/23 08:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 11:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 11:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 02:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 03:24	CH	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-35 0'

Lab Sample ID: 890-5314-15
Matrix: Solid
Date Collected: 09/20/23 11:13
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 12:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 12:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 02:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 03:30	CH	EET MID

Client Sample ID: BH23-35 2'

Lab Sample ID: 890-5314-16
Matrix: Solid
Date Collected: 09/20/23 11:17
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 12:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 12:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 02:52	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63237	09/26/23 03:36	CH	EET MID

Client Sample ID: BH23-36 0'

Lab Sample ID: 890-5314-17
Matrix: Solid
Date Collected: 09/20/23 11:23
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 13:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 13:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 03:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 03:42	CH	EET MID

Client Sample ID: BH23-36 2'

Lab Sample ID: 890-5314-18
Matrix: Solid
Date Collected: 09/20/23 11:26
Date Received: 09/21/23 08:25

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	63093	09/22/23 14:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63317	09/27/23 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63448	09/27/23 13:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	63095	09/22/23 14:56	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63030	09/23/23 03:35	SM	EET MID

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Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Client Sample ID: BH23-36 2'
Date Collected: 09/20/23 11:26
Date Received: 09/21/23 08:25

Lab Sample ID: 890-5314-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	63065	09/22/23 11:18	AG	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63237	09/26/23 03:47	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycling

Job ID: 890-5314-1
SDG: Mobley

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5314-1	BH23-29 0'	Solid	09/20/23 09:27	09/21/23 08:25	0'
890-5314-2	BH23-29 2'	Solid	09/20/23 09:32	09/21/23 08:25	2
890-5314-3	BH23-30 0'	Solid	09/20/23 09:36	09/21/23 08:25	0'
890-5314-4	BH23-30 2'	Solid	09/20/23 09:48	09/21/23 08:25	2'
890-5314-5	BH23-30 4'	Solid	09/20/23 10:00	09/21/23 08:25	4'
890-5314-6	BH23-31 0'	Solid	09/20/23 10:03	09/21/23 08:25	0'
890-5314-7	BH23-31 2'	Solid	09/20/23 10:13	09/21/23 08:25	2'
890-5314-8	BH23-32 0'	Solid	09/20/23 10:15	09/21/23 08:25	0'
890-5314-9	BH23-32 2'	Solid	09/20/23 10:17	09/21/23 08:25	2'
890-5314-10	BH23-33 0'	Solid	09/20/23 10:42	09/21/23 08:25	0'
890-5314-11	BH23-33 2'	Solid	09/20/23 10:48	09/21/23 08:25	2'
890-5314-12	BH23-34 0'	Solid	09/20/23 10:52	09/21/23 08:25	0'
890-5314-13	BH23-34 2'	Solid	09/20/23 11:00	09/21/23 08:25	2'
890-5314-14	BH23-34 4'	Solid	09/20/23 11:10	09/21/23 08:25	4'
890-5314-15	BH23-35 0'	Solid	09/20/23 11:13	09/21/23 08:25	0'
890-5314-16	BH23-35 2'	Solid	09/20/23 11:17	09/21/23 08:25	2'
890-5314-17	BH23-36 0'	Solid	09/20/23 11:23	09/21/23 08:25	0'
890-5314-18	BH23-36 2'	Solid	09/20/23 11:26	09/21/23 08:25	2'

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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: _____

www.xenco.com Page 1 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:	/	Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	236-04909	☒ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	09.30.23
Sampler's Name:	Heusaban Costafile	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

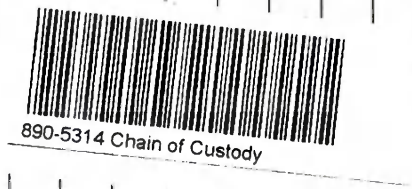
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TNM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.6	
Total Containers:		Corrected Temperature:	2.4	

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	TPH 8015 D	2	Sample Comments
BH23-29	0'	Soil	9.20.23	9:27	0'		1					
BH23-29	2'			9:32	2'		2					
BH23-30	0'			9:36	0'							
BH23-30	2'			9:48	2'							
BH23-30	4'			10:00	4'							
BH23-31	0'			10:03	0'							
BH23-31	2'			10:13	2'							
BH23-32	0'			10:15	0'							
BH23-32	2'			10:17	2'							
BH23-33	0'			10:42	0'							



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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/21 825	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc dcostafillo@vertex.ca.

9/28/2023

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Chain of Custody

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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:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:		City, State ZIP:	cdixon@vertex.ca
Phone:	/	Email:	

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:	Mobley Water Recycling 2	Turn Around	☒ Routine ☐ Rush
Project Number:	23E-04909	Due Date:	09.30.23
Project Location:	Mobley	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Lpeusavam Costa Filho		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	Yes No
Samples Received Intact:	(Yes) No	Thermometer ID:	TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	Parameters: TPH 8015	Parameters: cl
BH23-33	2'	Soil	9.20.23	10:48	2'	11	11				
BH23-34	0'			10:52	0'						
BH23-34	2'			11:01	2'						
BH23-34	4'			11:10	4'						
BH23-35	0'			11:13	0'						
BH23-35	2'			11:17	2'						
BH23-36	0'			11:23	0'						
BH23-36	2'			11:26	2'						

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 Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		9/21 825	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc dcostafilho@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5314-1
SDG Number: Mobley

Login Number: 5314
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5314-1
SDG Number: Mobley

Login Number: 5314
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/22/23 10:54 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 10/11/2023 8:28:53 AM

JOB DESCRIPTION

Mobley Water Recycling 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5350-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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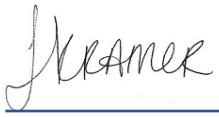
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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10/11/2023 8:28:53 AM

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

Client: Vertex
Project/Site: Mobley Water Recycling 2

Laboratory Job ID: 890-5350-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 17
QC Sample Results 19
QC Association Summary 25
Lab Chronicle 29
Certification Summary 33
Method Summary 34
Sample Summary 35
Chain of Custody 36
Receipt Checklists 38

Definitions/Glossary

Client: Vertex Job ID: 890-5350-1
Project/Site: Mobley Water Recycling 2 SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Job ID: 890-5350-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5350-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/26/2023 2:55 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-37 0 (890-5350-1), BH23-37 2 (890-5350-2), BH23-38 0 (890-5350-3), BH23-38 2 (890-5350-4), BH23-38 4 (890-5350-5), BH23-39 0 (890-5350-6), BH23-39 2 (890-5350-7), BH23-40 0 (890-5350-8), BH23-40 2 (890-5350-9), BH23-01 5 (890-5350-10), BH23-01 6 (890-5350-11) and BH23-03 5 (890-5350-12).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: BH23-40 2 (890-5350-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63671 and analytical batch 880-63845 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63922 recovered above the upper control limit for Benzene, Toluene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63923 and analytical batch 880-63922 was outside the upper control limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH23-37 0 (890-5350-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-63537 and analytical batch 880-63579 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC
Method 300_ORGFM_28D: The laboratory control sample (LCS) associated with preparation batch 880-63490 and analytical batch 880-63636 was outside acceptance criteria. Re-extraction and/or re-analysis was not performed. The batch matrix spike/matrix spike

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Case Narrative

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Job ID: 890-5350-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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.

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-37 0

Date Collected: 09/21/23 09:35
Date Received: 09/26/23 14:55
Sample Depth: 0

Lab Sample ID: 890-5350-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:48	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/04/23 08:42	10/04/23 17:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/04/23 08:42	10/04/23 17:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:48*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/04/23 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/29/23 12:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 12:24	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 12:24	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*09/28/23 13:58*	*09/29/23 12:24*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*09/28/23 13:58*	*09/29/23 12:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.4**	*-	5.03		mg/Kg			09/29/23 17:18	1

Client Sample ID: BH23-37 2

Date Collected: 09/21/23 09:44
Date Received: 09/26/23 14:55
Sample Depth: 2

Lab Sample ID: 890-5350-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 13:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 13:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*09/29/23 16:43*	*10/03/23 13:49*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-37 2

Date Collected: 09/21/23 09:44
Date Received: 09/26/23 14:55
Sample Depth: 2

Lab Sample ID: 890-5350-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*09/29/23 16:43*	*10/03/23 13:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/03/23 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/29/23 12:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 12:46	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 12:46	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*09/28/23 13:58*	*09/29/23 12:46*	*1*
o-Terphenyl	*82*		*70 - 130*	*09/28/23 13:58*	*09/29/23 12:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.3**	*-	5.01		mg/Kg			09/29/23 17:38	1

Client Sample ID: BH23-38 0

Date Collected: 09/21/23 09:55
Date Received: 09/26/23 14:55
Sample Depth: 0

Lab Sample ID: 890-5350-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 14:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 14:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 14:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 14:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 14:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:09*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/03/23 14:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/29/23 13:09	1

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-38 0

Date Collected: 09/21/23 09:55
Date Received: 09/26/23 14:55
Sample Depth: 0

Lab Sample ID: 890-5350-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 13:09	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 13:09	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:09*	*1*
o-Terphenyl	*99*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2890**	*-	49.5		mg/Kg			09/29/23 14:21	10

Client Sample ID: BH23-38 2

Date Collected: 09/21/23 10:02
Date Received: 09/26/23 14:55
Sample Depth: 2

Lab Sample ID: 890-5350-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:30	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/29/23 16:43	10/03/23 14:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/29/23 16:43	10/03/23 14:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:30*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/03/23 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/29/23 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:31	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:31	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:31*	*1*
o-Terphenyl	*97*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:31*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-38 2

Lab Sample ID: 890-5350-4
Matrix: Solid
Date Collected: 09/21/23 10:02
Date Received: 09/26/23 14:55
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5880	*-	99.4		mg/Kg			09/29/23 14:27	20

Client Sample ID: BH23-38 4

Lab Sample ID: 890-5350-5
Matrix: Solid
Date Collected: 09/21/23 10:12
Date Received: 09/26/23 14:55
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:50	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 14:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 14:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:50*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*09/29/23 16:43*	*10/03/23 14:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/03/23 14:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/29/23 13:52	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	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:52	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:52	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:52*	*1*
o-Terphenyl	*91*		*70 - 130*	*09/28/23 13:58*	*09/29/23 13:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	355	*-	4.96		mg/Kg			09/29/23 14:34	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-39 0

Date Collected: 09/21/23 10:20
Date Received: 09/26/23 14:55
Sample Depth: 0

Lab Sample ID: 890-5350-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/29/23 16:43	10/03/23 15:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/29/23 16:43	10/03/23 15:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/29/23 16:43	10/03/23 15:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/29/23 16:43	10/03/23 15:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/29/23 16:43	10/03/23 15:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/29/23 16:43	10/03/23 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:11*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/03/23 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/29/23 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 14:15	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 14:15	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/28/23 13:58	09/29/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:15*	*1*
o-Terphenyl	*95*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.4**	*-	5.02		mg/Kg			09/29/23 17:45	1

Client Sample ID: BH23-39 2

Date Collected: 09/21/23 10:25
Date Received: 09/26/23 14:55
Sample Depth: 2

Lab Sample ID: 890-5350-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 15:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 15:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:31*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-39 2

Date Collected: 09/21/23 10:25
Date Received: 09/26/23 14:55
Sample Depth: 2

Lab Sample ID: 890-5350-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/03/23 15:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/29/23 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 14:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 14:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:37*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**234**	*-	5.01		mg/Kg			09/29/23 17:51	1

Client Sample ID: BH23-40 0

Date Collected: 09/21/23 10:43
Date Received: 09/26/23 14:55
Sample Depth: 0

Lab Sample ID: 890-5350-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 15:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/29/23 16:43	10/03/23 15:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/29/23 16:43	10/03/23 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:52*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/29/23 16:43*	*10/03/23 15:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/03/23 15:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/29/23 14:58	1

Eurofins Carlsbad

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-40 0

Lab Sample ID: 890-5350-8
Matrix: Solid
Date Collected: 09/21/23 10:43
Date Received: 09/26/23 14:55
Sample Depth: 0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 14:58	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 14:58	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:58*	*1*
o-Terphenyl	*112*		*70 - 130*	*09/28/23 13:58*	*09/29/23 14:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7900**	*-	99.4		mg/Kg			09/29/23 15:07	20

Client Sample ID: BH23-40 2

Lab Sample ID: 890-5350-9
Matrix: Solid
Date Collected: 09/21/23 10:52
Date Received: 09/26/23 14:55
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:12	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/29/23 16:43	10/03/23 16:12	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/29/23 16:43	10/03/23 16:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*09/29/23 16:43*	*10/03/23 16:12*	*1*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*09/29/23 16:43*	*10/03/23 16:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/03/23 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/29/23 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 15:42	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 15:42	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*09/28/23 13:58*	*09/29/23 15:42*	*1*
o-Terphenyl	*95*		*70 - 130*	*09/28/23 13:58*	*09/29/23 15:42*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-40 2

Lab Sample ID: 890-5350-9
Matrix: Solid
Date Collected: 09/21/23 10:52
Date Received: 09/26/23 14:55
Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1160	*-	24.9		mg/Kg			09/29/23 15:14	5

Client Sample ID: BH23-01 5

Lab Sample ID: 890-5350-10
Matrix: Solid
Date Collected: 09/21/23 11:55
Date Received: 09/26/23 14:55
Sample Depth: 5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 16:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/29/23 16:43	10/03/23 16:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*09/29/23 16:43*	*10/03/23 16:33*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/29/23 16:43*	*10/03/23 16:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/03/23 16:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/29/23 16:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 16:04	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 16:04	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/28/23 13:58	09/29/23 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:04*	*1*
o-Terphenyl	*100*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244	*-	4.98		mg/Kg			09/29/23 15:20	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-01 6

Date Collected: 09/21/23 12:01
Date Received: 09/26/23 14:55
Sample Depth: 6

Lab Sample ID: 890-5350-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/04/23 08:42	10/04/23 17:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/04/23 08:42	10/04/23 17:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:07*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/04/23 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/29/23 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 16:26	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 16:26	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/28/23 13:58	09/29/23 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:26*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**161**	*-	5.02		mg/Kg			09/29/23 15:27	1

Client Sample ID: BH23-03 5

Date Collected: 09/21/23 12:22
Date Received: 09/26/23 14:55
Sample Depth: 5

Lab Sample ID: 890-5350-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/04/23 08:42	10/04/23 17:27	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/04/23 08:42	10/04/23 17:27	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/04/23 08:42	10/04/23 17:27	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/04/23 08:42	10/04/23 17:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/04/23 08:42	10/04/23 17:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/04/23 08:42	10/04/23 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:27*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-03 5
Date Collected: 09/21/23 12:22
Date Received: 09/26/23 14:55
Sample Depth: 5

Lab Sample ID: 890-5350-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*10/04/23 08:42*	*10/04/23 17:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/04/23 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/29/23 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 16:49	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 16:49	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/28/23 13:58	09/29/23 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:49*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/28/23 13:58*	*09/29/23 16:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**265**	*-	5.04		mg/Kg			09/29/23 15:47	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-33935-A-2-D MS	Matrix Spike	96	107
880-33935-A-2-E MSD	Matrix Spike Duplicate	107	101
890-5350-1	BH23-37 0	104	115
890-5350-2	BH23-37 2	87	73
890-5350-3	BH23-38 0	79	92
890-5350-4	BH23-38 2	88	74
890-5350-5	BH23-38 4	84	92
890-5350-6	BH23-39 0	89	73
890-5350-7	BH23-39 2	80	93
890-5350-8	BH23-40 0	82	91
890-5350-9	BH23-40 2	90	69 S1-
890-5350-10	BH23-01 5	82	93
890-5350-11	BH23-01 6	87	99
890-5350-12	BH23-03 5	104	108
890-5350-A-1-E MS	890-5350-A-1-E MS	120	113
890-5350-A-1-F MSD	890-5350-A-1-F MSD	115	114
LCS 880-63671/1-A	Lab Control Sample	116	111
LCS 880-63923/1-A	Lab Control Sample	108	106
LCSD 880-63671/2-A	Lab Control Sample Dup	118	119
LCSD 880-63923/2-A	Lab Control Sample Dup	90	95
MB 880-63671/5-A	Method Blank	72	91
MB 880-63923/5-A	Method Blank	104	134 S1+

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-5341-A-1-F MS	Matrix Spike	93	89
890-5341-A-1-G MSD	Matrix Spike Duplicate	109	103
890-5350-1	BH23-37 0	60 S1-	60 S1-
890-5350-2	BH23-37 2	81	82
890-5350-3	BH23-38 0	94	99
890-5350-4	BH23-38 2	94	97
890-5350-5	BH23-38 4	89	91
890-5350-6	BH23-39 0	96	95
890-5350-7	BH23-39 2	93	98
890-5350-8	BH23-40 0	103	112
890-5350-9	BH23-40 2	94	95
890-5350-10	BH23-01 5	100	100
890-5350-11	BH23-01 6	93	94
890-5350-12	BH23-03 5	96	98
LCS 880-63537/2-A	Lab Control Sample	111	124
LCSD 880-63537/3-A	Lab Control Sample Dup	83	94
MB 880-63537/1-A	Method Blank	77	87

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63671/5-A
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/23 16:43	10/03/23 13:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/23 16:43	10/03/23 13:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 16:43	10/03/23 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*09/29/23 16:43*	*10/03/23 13:03*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*09/29/23 16:43*	*10/03/23 13:03*	*1*

Lab Sample ID: LCS 880-63671/1-A
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1138		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1108		mg/Kg		111	70 - 130
Toluene	0.100	0.1091		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2327		mg/Kg		116	70 - 130
o-Xylene	0.100	0.1161		mg/Kg		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-63671/2-A
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63671

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1144		mg/Kg		114	70 - 130	1	35
Ethylbenzene	0.100	0.1110		mg/Kg		111	70 - 130	0	35
Toluene	0.100	0.1116		mg/Kg		112	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130	1	35
o-Xylene	0.100	0.1169		mg/Kg		117	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*

Lab Sample ID: 890-5350-A-1-E MS
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: 890-5350-A-1-E MS
Prep Type: Total/NA
Prep Batch: 63671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.00238		0.0998	0.07195		mg/Kg		70	70 - 130
Ethylbenzene	0.00489		0.0998	0.08224		mg/Kg		78	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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

Lab Sample ID: 890-5350-A-1-E MS
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: 890-5350-A-1-E MS
Prep Type: Total/NA
Prep Batch: 63671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	0.0990	F1	0.0998	0.07421	F1	mg/Kg		-25	70 - 130
m-Xylene & p-Xylene	0.0156		0.200	0.1665		mg/Kg		76	70 - 130
o-Xylene	0.00729		0.0998	0.08623		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

Lab Sample ID: 890-5350-A-1-F MSD
Matrix: Solid
Analysis Batch: 63845

Client Sample ID: 890-5350-A-1-F MSD
Prep Type: Total/NA
Prep Batch: 63671

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.00238		0.0990	0.08917		mg/Kg		88	70 - 130	21	35
Ethylbenzene	0.00489		0.0990	0.09275		mg/Kg		89	70 - 130	12	35
Toluene	0.0990	F1	0.0990	0.08724	F1	mg/Kg		-12	70 - 130	16	35
m-Xylene & p-Xylene	0.0156		0.198	0.1885		mg/Kg		87	70 - 130	12	35
o-Xylene	0.00729		0.0990	0.09461		mg/Kg		88	70 - 130	9	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: MB 880-63923/5-A
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/04/23 08:42	10/04/23 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/04/23 08:42	10/04/23 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 08:42	10/04/23 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*10/04/23 08:42*	*10/04/23 11:43*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*10/04/23 08:42*	*10/04/23 11:43*	*1*

Lab Sample ID: LCS 880-63923/1-A
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09581		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.08551		mg/Kg		86	70 - 130
Toluene	0.100	0.08367		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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

Lab Sample ID: LCS 880-63923/1-A
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63923

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09326		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-63923/2-A
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63923

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1064		mg/Kg		106	70 - 130	10	35
Ethylbenzene			0.100	0.07947		mg/Kg		79	70 - 130	7	35
Toluene			0.100	0.09190		mg/Kg		92	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1743		mg/Kg		87	70 - 130	10	35
o-Xylene			0.100	0.09054		mg/Kg		91	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-33935-A-2-D MS
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U	0.0998	0.1152		mg/Kg		115	70 - 130		
Ethylbenzene	<0.00198	U	0.0998	0.09123		mg/Kg		91	70 - 130		
Toluene	<0.00198	U	0.0998	0.09615		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1970		mg/Kg		99	70 - 130		
o-Xylene	<0.00198	U	0.0998	0.09331		mg/Kg		93	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 880-33935-A-2-E MSD
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.08375		mg/Kg		84	70 - 130	32	35
Ethylbenzene	<0.00198	U	0.100	0.07248		mg/Kg		72	70 - 130	23	35
Toluene	<0.00198	U	0.100	0.07419		mg/Kg		74	70 - 130	26	35
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1627		mg/Kg		81	70 - 130	19	35
o-Xylene	<0.00198	U	0.100	0.08011		mg/Kg		79	70 - 130	15	35

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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

Lab Sample ID: 880-33935-A-2-E MSD
Matrix: Solid
Analysis Batch: 63922

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63923

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-63537/1-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63537

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 08:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 08:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/28/23 13:58	09/29/23 08:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	09/28/23 13:58	09/29/23 08:01	1
o-Terphenyl	87		70 - 130	09/28/23 13:58	09/29/23 08:01	1

Lab Sample ID: LCS 880-63537/2-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63537

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	965.2		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	921.3		mg/Kg		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-63537/3-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63537

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	949.0		mg/Kg		95	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	845.0		mg/Kg		84	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	94		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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

Lab Sample ID: 890-5341-A-1-F MS
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	1177		mg/Kg		115	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	891.6		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Lab Sample ID: 890-5341-A-1-G MSD
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	912.0	F2	mg/Kg		89	70 - 130	25	20
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	1040		mg/Kg		99	70 - 130	15	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63490/1-A
Matrix: Solid
Analysis Batch: 63636

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		mg/Kg			09/29/23 13:34	1

Lab Sample ID: LCS 880-63490/2-A
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	213.5	*-	mg/Kg		85	90 - 110

Lab Sample ID: LCSD 880-63490/3-A
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	229.4		mg/Kg		92	90 - 110	7	20

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5350-1 MS — **Client Sample ID: BH23-37 0**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	90.4	*-	252	363.6		mg/Kg		109	90 - 110		

Lab Sample ID: 890-5350-1 MSD — **Client Sample ID: BH23-37 0**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63636

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	90.4	*-	252	363.4		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 890-5350-11 MS — **Client Sample ID: BH23-01 6**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	161	*-	251	411.8		mg/Kg		100	90 - 110		

Lab Sample ID: 890-5350-11 MSD — **Client Sample ID: BH23-01 6**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 63636

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	161	*-	251	411.4		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

GC VOA

Prep Batch: 63671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-2	BH23-37 2	Total/NA	Solid	5035	
890-5350-3	BH23-38 0	Total/NA	Solid	5035	
890-5350-4	BH23-38 2	Total/NA	Solid	5035	
890-5350-5	BH23-38 4	Total/NA	Solid	5035	
890-5350-6	BH23-39 0	Total/NA	Solid	5035	
890-5350-7	BH23-39 2	Total/NA	Solid	5035	
890-5350-8	BH23-40 0	Total/NA	Solid	5035	
890-5350-9	BH23-40 2	Total/NA	Solid	5035	
890-5350-10	BH23-01 5	Total/NA	Solid	5035	
MB 880-63671/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63671/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63671/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5350-A-1-E MS	890-5350-A-1-E MS	Total/NA	Solid	5035	
890-5350-A-1-F MSD	890-5350-A-1-F MSD	Total/NA	Solid	5035	

Analysis Batch: 63845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-2	BH23-37 2	Total/NA	Solid	8021B	63671
890-5350-3	BH23-38 0	Total/NA	Solid	8021B	63671
890-5350-4	BH23-38 2	Total/NA	Solid	8021B	63671
890-5350-5	BH23-38 4	Total/NA	Solid	8021B	63671
890-5350-6	BH23-39 0	Total/NA	Solid	8021B	63671
890-5350-7	BH23-39 2	Total/NA	Solid	8021B	63671
890-5350-8	BH23-40 0	Total/NA	Solid	8021B	63671
890-5350-9	BH23-40 2	Total/NA	Solid	8021B	63671
890-5350-10	BH23-01 5	Total/NA	Solid	8021B	63671
MB 880-63671/5-A	Method Blank	Total/NA	Solid	8021B	63671
LCS 880-63671/1-A	Lab Control Sample	Total/NA	Solid	8021B	63671
LCSD 880-63671/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63671
890-5350-A-1-E MS	890-5350-A-1-E MS	Total/NA	Solid	8021B	63671
890-5350-A-1-F MSD	890-5350-A-1-F MSD	Total/NA	Solid	8021B	63671

Analysis Batch: 63922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	8021B	63923
890-5350-11	BH23-01 6	Total/NA	Solid	8021B	63923
890-5350-12	BH23-03 5	Total/NA	Solid	8021B	63923
MB 880-63923/5-A	Method Blank	Total/NA	Solid	8021B	63923
LCS 880-63923/1-A	Lab Control Sample	Total/NA	Solid	8021B	63923
LCSD 880-63923/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63923
880-33935-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	63923
880-33935-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63923

Prep Batch: 63923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	5035	
890-5350-11	BH23-01 6	Total/NA	Solid	5035	
890-5350-12	BH23-03 5	Total/NA	Solid	5035	
MB 880-63923/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63923/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63923/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

GC VOA (Continued)

Prep Batch: 63923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-33935-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
880-33935-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 63938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	Total BTEX	
890-5350-2	BH23-37 2	Total/NA	Solid	Total BTEX	
890-5350-3	BH23-38 0	Total/NA	Solid	Total BTEX	
890-5350-4	BH23-38 2	Total/NA	Solid	Total BTEX	
890-5350-5	BH23-38 4	Total/NA	Solid	Total BTEX	
890-5350-6	BH23-39 0	Total/NA	Solid	Total BTEX	
890-5350-7	BH23-39 2	Total/NA	Solid	Total BTEX	
890-5350-8	BH23-40 0	Total/NA	Solid	Total BTEX	
890-5350-9	BH23-40 2	Total/NA	Solid	Total BTEX	
890-5350-10	BH23-01 5	Total/NA	Solid	Total BTEX	
890-5350-11	BH23-01 6	Total/NA	Solid	Total BTEX	
890-5350-12	BH23-03 5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	8015NM Prep	
890-5350-2	BH23-37 2	Total/NA	Solid	8015NM Prep	
890-5350-3	BH23-38 0	Total/NA	Solid	8015NM Prep	
890-5350-4	BH23-38 2	Total/NA	Solid	8015NM Prep	
890-5350-5	BH23-38 4	Total/NA	Solid	8015NM Prep	
890-5350-6	BH23-39 0	Total/NA	Solid	8015NM Prep	
890-5350-7	BH23-39 2	Total/NA	Solid	8015NM Prep	
890-5350-8	BH23-40 0	Total/NA	Solid	8015NM Prep	
890-5350-9	BH23-40 2	Total/NA	Solid	8015NM Prep	
890-5350-10	BH23-01 5	Total/NA	Solid	8015NM Prep	
890-5350-11	BH23-01 6	Total/NA	Solid	8015NM Prep	
890-5350-12	BH23-03 5	Total/NA	Solid	8015NM Prep	
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5341-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5341-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	8015B NM	63537
890-5350-2	BH23-37 2	Total/NA	Solid	8015B NM	63537
890-5350-3	BH23-38 0	Total/NA	Solid	8015B NM	63537
890-5350-4	BH23-38 2	Total/NA	Solid	8015B NM	63537
890-5350-5	BH23-38 4	Total/NA	Solid	8015B NM	63537
890-5350-6	BH23-39 0	Total/NA	Solid	8015B NM	63537
890-5350-7	BH23-39 2	Total/NA	Solid	8015B NM	63537
890-5350-8	BH23-40 0	Total/NA	Solid	8015B NM	63537
890-5350-9	BH23-40 2	Total/NA	Solid	8015B NM	63537

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

GC Semi VOA (Continued)

Analysis Batch: 63579 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-10	BH23-01 5	Total/NA	Solid	8015B NM	63537
890-5350-11	BH23-01 6	Total/NA	Solid	8015B NM	63537
890-5350-12	BH23-03 5	Total/NA	Solid	8015B NM	63537
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015B NM	63537
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63537
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63537
890-5341-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	63537
890-5341-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63537

Analysis Batch: 64438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Total/NA	Solid	8015 NM	
890-5350-2	BH23-37 2	Total/NA	Solid	8015 NM	
890-5350-3	BH23-38 0	Total/NA	Solid	8015 NM	
890-5350-4	BH23-38 2	Total/NA	Solid	8015 NM	
890-5350-5	BH23-38 4	Total/NA	Solid	8015 NM	
890-5350-6	BH23-39 0	Total/NA	Solid	8015 NM	
890-5350-7	BH23-39 2	Total/NA	Solid	8015 NM	
890-5350-8	BH23-40 0	Total/NA	Solid	8015 NM	
890-5350-9	BH23-40 2	Total/NA	Solid	8015 NM	
890-5350-10	BH23-01 5	Total/NA	Solid	8015 NM	
890-5350-11	BH23-01 6	Total/NA	Solid	8015 NM	
890-5350-12	BH23-03 5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Soluble	Solid	DI Leach	
890-5350-2	BH23-37 2	Soluble	Solid	DI Leach	
890-5350-3	BH23-38 0	Soluble	Solid	DI Leach	
890-5350-4	BH23-38 2	Soluble	Solid	DI Leach	
890-5350-5	BH23-38 4	Soluble	Solid	DI Leach	
890-5350-6	BH23-39 0	Soluble	Solid	DI Leach	
890-5350-7	BH23-39 2	Soluble	Solid	DI Leach	
890-5350-8	BH23-40 0	Soluble	Solid	DI Leach	
890-5350-9	BH23-40 2	Soluble	Solid	DI Leach	
890-5350-10	BH23-01 5	Soluble	Solid	DI Leach	
890-5350-11	BH23-01 6	Soluble	Solid	DI Leach	
890-5350-12	BH23-03 5	Soluble	Solid	DI Leach	
MB 880-63490/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5350-1 MS	BH23-37 0	Soluble	Solid	DI Leach	
890-5350-1 MSD	BH23-37 0	Soluble	Solid	DI Leach	
890-5350-11 MS	BH23-01 6	Soluble	Solid	DI Leach	
890-5350-11 MSD	BH23-01 6	Soluble	Solid	DI Leach	

Analysis Batch: 63636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-1	BH23-37 0	Soluble	Solid	300.0	63490

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

HPLC/IC (Continued)

Analysis Batch: 63636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5350-2	BH23-37 2	Soluble	Solid	300.0	63490
890-5350-3	BH23-38 0	Soluble	Solid	300.0	63490
890-5350-4	BH23-38 2	Soluble	Solid	300.0	63490
890-5350-5	BH23-38 4	Soluble	Solid	300.0	63490
890-5350-6	BH23-39 0	Soluble	Solid	300.0	63490
890-5350-7	BH23-39 2	Soluble	Solid	300.0	63490
890-5350-8	BH23-40 0	Soluble	Solid	300.0	63490
890-5350-9	BH23-40 2	Soluble	Solid	300.0	63490
890-5350-10	BH23-01 5	Soluble	Solid	300.0	63490
890-5350-11	BH23-01 6	Soluble	Solid	300.0	63490
890-5350-12	BH23-03 5	Soluble	Solid	300.0	63490
MB 880-63490/1-A	Method Blank	Soluble	Solid	300.0	63490
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	300.0	63490
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63490
890-5350-1 MS	BH23-37 0	Soluble	Solid	300.0	63490
890-5350-1 MSD	BH23-37 0	Soluble	Solid	300.0	63490
890-5350-11 MS	BH23-01 6	Soluble	Solid	300.0	63490
890-5350-11 MSD	BH23-01 6	Soluble	Solid	300.0	63490

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-37 0

Lab Sample ID: 890-5350-1
Matrix: Solid
Date Collected: 09/21/23 09:35
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 17:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/04/23 17:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 12:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 12:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 17:18	SMC	EET MID

Client Sample ID: BH23-37 2

Lab Sample ID: 890-5350-2
Matrix: Solid
Date Collected: 09/21/23 09:44
Date Received: 09/26/23 14:55

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	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 13:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 13:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 12:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 12:46	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 17:38	SMC	EET MID

Client Sample ID: BH23-38 0

Lab Sample ID: 890-5350-3
Matrix: Solid
Date Collected: 09/21/23 09:55
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 14:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 14:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 13:09	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 13:09	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63636	09/29/23 14:21	SMC	EET MID

Client Sample ID: BH23-38 2

Lab Sample ID: 890-5350-4
Matrix: Solid
Date Collected: 09/21/23 10:02
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 14:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 14:30	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-38 2

Lab Sample ID: 890-5350-4
Matrix: Solid
Date Collected: 09/21/23 10:02
Date Received: 09/26/23 14:55

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			64438	09/29/23 13:31	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 13:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63636	09/29/23 14:27	SMC	EET MID

Client Sample ID: BH23-38 4

Lab Sample ID: 890-5350-5
Matrix: Solid
Date Collected: 09/21/23 10:12
Date Received: 09/26/23 14:55

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	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 14:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 14:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 13:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 13:52	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 14:34	SMC	EET MID

Client Sample ID: BH23-39 0

Lab Sample ID: 890-5350-6
Matrix: Solid
Date Collected: 09/21/23 10:20
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 15:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 15:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 14:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 14:15	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 17:45	SMC	EET MID

Client Sample ID: BH23-39 2

Lab Sample ID: 890-5350-7
Matrix: Solid
Date Collected: 09/21/23 10:25
Date Received: 09/26/23 14:55

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	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 15:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 15:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 14:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 14:37	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-39 2

Lab Sample ID: 890-5350-7
Matrix: Solid
Date Collected: 09/21/23 10:25
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 17:51	SMC	EET MID

Client Sample ID: BH23-40 0

Lab Sample ID: 890-5350-8
Matrix: Solid
Date Collected: 09/21/23 10:43
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 15:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 14:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 14:58	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	63636	09/29/23 15:07	SMC	EET MID

Client Sample ID: BH23-40 2

Lab Sample ID: 890-5350-9
Matrix: Solid
Date Collected: 09/21/23 10:52
Date Received: 09/26/23 14:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 16:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 16:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 15:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 15:42	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63636	09/29/23 15:14	SMC	EET MID

Client Sample ID: BH23-01 5

Lab Sample ID: 890-5350-10
Matrix: Solid
Date Collected: 09/21/23 11:55
Date Received: 09/26/23 14:55

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	63671	09/29/23 16:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63845	10/03/23 16:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/03/23 16:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 16:04	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 16:04	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 15:20	SMC	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Client Sample ID: BH23-01 6

Date Collected: 09/21/23 12:01
Date Received: 09/26/23 14:55

Lab Sample ID: 890-5350-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 17:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/04/23 17:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 16:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 16:26	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 15:27	SMC	EET MID

Client Sample ID: BH23-03 5

Date Collected: 09/21/23 12:22
Date Received: 09/26/23 14:55

Lab Sample ID: 890-5350-12

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			4.97 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 17:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			63938	10/04/23 17:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			64438	09/29/23 16:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 16:49	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 15:47	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recycling 2

Job ID: 890-5350-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5350-1	BH23-37 0	Solid	09/21/23 09:35	09/26/23 14:55	0
890-5350-2	BH23-37 2	Solid	09/21/23 09:44	09/26/23 14:55	2
890-5350-3	BH23-38 0	Solid	09/21/23 09:55	09/26/23 14:55	0
890-5350-4	BH23-38 2	Solid	09/21/23 10:02	09/26/23 14:55	2
890-5350-5	BH23-38 4	Solid	09/21/23 10:12	09/26/23 14:55	4
890-5350-6	BH23-39 0	Solid	09/21/23 10:20	09/26/23 14:55	0
890-5350-7	BH23-39 2	Solid	09/21/23 10:25	09/26/23 14:55	2
890-5350-8	BH23-40 0	Solid	09/21/23 10:43	09/26/23 14:55	0
890-5350-9	BH23-40 2	Solid	09/21/23 10:52	09/26/23 14:55	2
890-5350-10	BH23-01 5	Solid	09/21/23 11:55	09/26/23 14:55	5
890-5350-11	BH23-01 6	Solid	09/21/23 12:01	09/26/23 14:55	6
890-5350-12	BH23-03 5	Solid	09/21/23 12:22	09/26/23 14:55	5

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

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 2

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:		City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☑ Routine ☐ Rush	
Project Location:	Mobley	Due Date:	09.30.23
Sampler's Name:	Ifeuseven Costafilho	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#07
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.0
Total Containers:		Corrected Temperature:	1.8

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	TPH 8015	Cl
BH23-37	0'	Soil	9.21.23	9:35	0'	Grab	1		X	X	X
BH23-37	2'			9:44	2'		2				
BH23-38	0'			9:55	0'						
BH23-38	2'			10:02	2'						
BH23-38	4'			10:12	4'						
BH23-39	0'			10:20	0'						
BH23-39	2'			10:25	2'						
BH23-40	0'			10:43	0'						
BH23-40	2'			10:52	2'						
~~BG23~~-BG23-01	5'			11:55	5'						

890-5350 Chain of Custody

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		13:02 9-20	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

please cc Ifeuseven Costafilho at dcostafilho@vertex.~~com~~ca.

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Received by OCD: 7/31/2024 4:04:52 PM

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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:

www.xenco.com Page 2 of 2

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:		Email:	

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:	Hobbs Water Recycling 2	Turn Around	
Project Number:	23E-04909	☒ Routine ☐ Rush	
Project Location:	Hobbs	Due Date:	9.30.23
Sampler's Name:	Dewayne Costafilho	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:	TNH007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

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	TPH 8015	Cl	Sample Comments
BG23-01 6'	Soil	9.21.23	12:01	6'		11		X	X	X	
BG23-03 5'	↓	↓	12:22	5'		12		X	X	X	

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12:02 9-26	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc dewayne costafilho at dcostafilho@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5350-1
SDG Number: 23E-04909

Login Number: 5350
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5350-1
SDG Number: 23E-04909

Login Number: 5350
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/28/23 10:44 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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 10/5/2023 1:33:42 PM

JOB DESCRIPTION

MOBLEY WATER RECYCLING 2
SDG NUMBER 23E-04909

JOB NUMBER

890-5354-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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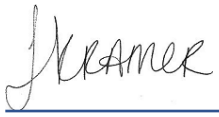
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Laboratory Job ID: 890-5354-1
SDG: 23E-04909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 8
QC Sample Results 9
QC Association Summary 13
Lab Chronicle 15
Certification Summary 16
Method Summary 17
Sample Summary 18
Chain of Custody 19
Receipt Checklists 20

Definitions/Glossary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Job ID: 890-5354-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5354-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 9/26/2023 1:02 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-46 (890-5354-1) and BH23-44 (890-5354-2).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63921 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following samples were outside control limits: BH23-46 (890-5354-1) and BH23-44 (890-5354-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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: (880-33751-A-21-E MS) and (880-33751-A-21-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63538 and analytical batch 880-63575 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The laboratory control sample (LCS) associated with preparation batch 880-63490 and analytical batch 880-63636 was outside acceptance criteria. Re-extraction and/or re-analysis was not performed. 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.

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Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Client Sample ID: BH23-46

Date Collected: 09/22/23 12:57
Date Received: 09/26/23 13:02

Lab Sample ID: 890-5354-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 12:00	10/04/23 13:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 12:00	10/04/23 13:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 12:00	10/04/23 13:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/04/23 12:00	10/04/23 13:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/04/23 12:00	10/04/23 13:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 12:00	10/04/23 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*10/04/23 12:00*	*10/04/23 13:59*	*1*
1,4-Difluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*10/04/23 12:00*	*10/04/23 13:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/04/23 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			09/29/23 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		09/28/23 14:10	09/29/23 16:50	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		09/28/23 14:10	09/29/23 16:50	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		09/28/23 14:10	09/29/23 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*09/28/23 14:10*	*09/29/23 16:50*	*1*
o-Terphenyl	*85*		*70 - 130*	*09/28/23 14:10*	*09/29/23 16:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**604**	***-**	5.03		mg/Kg			09/29/23 16:52	1

Client Sample ID: BH23-44

Date Collected: 09/22/23 13:13
Date Received: 09/26/23 13:02

Lab Sample ID: 890-5354-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/04/23 12:00	10/04/23 14:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/04/23 12:00	10/04/23 14:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/04/23 12:00	10/04/23 14:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/04/23 12:00	10/04/23 14:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/04/23 12:00	10/04/23 14:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/04/23 12:00	10/04/23 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*10/04/23 12:00*	*10/04/23 14:20*	*1*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*10/04/23 12:00*	*10/04/23 14:20*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Client Sample ID: BH23-44

Date Collected: 09/22/23 13:13
Date Received: 09/26/23 13:02

Lab Sample ID: 890-5354-2

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/04/23 14:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/29/23 17:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/28/23 14:10	09/29/23 17:12	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/28/23 14:10	09/29/23 17:12	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/28/23 14:10	09/29/23 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*09/28/23 14:10*	*09/29/23 17:12*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/28/23 14:10*	*09/29/23 17:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**757**	*-	5.03		mg/Kg			09/29/23 16:58	1

Surrogate Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
890-5354-1	BH23-46	94	63 S1-										
890-5354-2	BH23-44	86	67 S1-										
890-5363-A-1-E MS	Matrix Spike	120	114										
890-5363-A-1-F MSD	Matrix Spike Duplicate	115	113										
LCS 880-63673/1-A	Lab Control Sample	109	112										
LCSD 880-63673/2-A	Lab Control Sample Dup	105	115										
MB 880-63673/5-A	Method Blank	71	96										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-33751-A-21-E MS	Matrix Spike	64 S1-	60 S1-										
880-33751-A-21-F MSD	Matrix Spike Duplicate	64 S1-	60 S1-										
890-5354-1	BH23-46	76	85										
890-5354-2	BH23-44	80	88										
LCS 880-63538/2-A	Lab Control Sample	104	112										
LCSD 880-63538/3-A	Lab Control Sample Dup	96	102										
MB 880-63538/1-A	Method Blank	97	118										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63673/5-A
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/29/23 17:05	10/04/23 12:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/29/23 17:05	10/04/23 12:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/29/23 17:05	10/04/23 12:16	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/29/23 17:05	10/04/23 12:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/29/23 17:05	10/04/23 12:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/29/23 17:05	10/04/23 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*09/29/23 17:05*	*10/04/23 12:16*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/29/23 17:05*	*10/04/23 12:16*	*1*

Lab Sample ID: LCS 880-63673/1-A
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1010		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09462		mg/Kg		95	70 - 130
Toluene	0.100	0.09536		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1973		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09686		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 880-63673/2-A
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63673

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1025		mg/Kg		103	70 - 130	2	35
Ethylbenzene	0.100	0.09689		mg/Kg		97	70 - 130	2	35
Toluene	0.100	0.09879		mg/Kg		99	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2016		mg/Kg		101	70 - 130	2	35
o-Xylene	0.100	0.09827		mg/Kg		98	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 890-5363-A-1-E MS
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.08019		mg/Kg		80	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.08320		mg/Kg		83	70 - 130

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

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

Lab Sample ID: 890-5363-A-1-E MS
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00200	U	0.0998	0.07901		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1649		mg/Kg		83	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08434		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 890-5363-A-1-F MSD
Matrix: Solid
Analysis Batch: 63921

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.09056		mg/Kg		91	70 - 130	12	35
Ethylbenzene	<0.00200	U	0.0996	0.08928		mg/Kg		90	70 - 130	7	35
Toluene	<0.00200	U	0.0996	0.08658		mg/Kg		87	70 - 130	9	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1755		mg/Kg		88	70 - 130	6	35
o-Xylene	<0.00200	U	0.0996	0.08932		mg/Kg		90	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

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

Lab Sample ID: MB 880-63538/1-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/28/23 14:02	09/29/23 07:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/28/23 14:02	09/29/23 07:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/28/23 14:02	09/29/23 07:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*09/28/23 14:02*	*09/29/23 07:54*	*1*
o-Terphenyl	*118*		*70 - 130*	*09/28/23 14:02*	*09/29/23 07:54*	*1*

Lab Sample ID: LCS 880-63538/2-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1130		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1110		mg/Kg		111	70 - 130

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

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

Lab Sample ID: LCS 880-63538/2-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63538

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: LCSD 880-63538/3-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63538

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	953.1		mg/Kg		95	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1082		mg/Kg		108	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 880-33751-A-21-E MS
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F1	1010	641.7	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	603.8	F1	mg/Kg		56	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

Lab Sample ID: 880-33751-A-21-F MSD
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F1	1010	630.6	F1	mg/Kg		60	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	610.1	F1	mg/Kg		57	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63490/1-A
Matrix: Solid
Analysis Batch: 63636

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		mg/Kg			09/29/23 13:34	1

Lab Sample ID: LCS 880-63490/2-A
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	213.5	*-	mg/Kg		85	90 - 110		

Lab Sample ID: LCSD 880-63490/3-A
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	229.4		mg/Kg		92	90 - 110	7	20

Lab Sample ID: 890-5350-A-11-B MS
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	161	*-	251	411.8		mg/Kg		100	90 - 110		

Lab Sample ID: 890-5350-A-11-C MSD
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	161	*-	251	411.4		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

GC VOA

Prep Batch: 63673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	5035	
890-5354-2	BH23-44	Total/NA	Solid	5035	
MB 880-63673/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63673/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63673/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5363-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-5363-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 63921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	8021B	63673
890-5354-2	BH23-44	Total/NA	Solid	8021B	63673
MB 880-63673/5-A	Method Blank	Total/NA	Solid	8021B	63673
LCS 880-63673/1-A	Lab Control Sample	Total/NA	Solid	8021B	63673
LCSD 880-63673/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63673
890-5363-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	63673
890-5363-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63673

Analysis Batch: 64032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	Total BTEX	
890-5354-2	BH23-44	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	8015NM Prep	
890-5354-2	BH23-44	Total/NA	Solid	8015NM Prep	
MB 880-63538/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63538/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63538/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33751-A-21-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33751-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	8015B NM	63538
890-5354-2	BH23-44	Total/NA	Solid	8015B NM	63538
MB 880-63538/1-A	Method Blank	Total/NA	Solid	8015B NM	63538
LCS 880-63538/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63538
LCSD 880-63538/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63538
880-33751-A-21-E MS	Matrix Spike	Total/NA	Solid	8015B NM	63538
880-33751-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63538

Analysis Batch: 63738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Total/NA	Solid	8015 NM	
890-5354-2	BH23-44	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

HPLC/IC

Leach Batch: 63490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Soluble	Solid	DI Leach	
890-5354-2	BH23-44	Soluble	Solid	DI Leach	
MB 880-63490/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5350-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 63636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5354-1	BH23-46	Soluble	Solid	300.0	63490
890-5354-2	BH23-44	Soluble	Solid	300.0	63490
MB 880-63490/1-A	Method Blank	Soluble	Solid	300.0	63490
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	300.0	63490
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63490
890-5350-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	63490
890-5350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63490

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Client Sample ID: BH23-46

Date Collected: 09/22/23 12:57
Date Received: 09/26/23 13:02

Lab Sample ID: 890-5354-1

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			4.99 g	5 mL	63673	10/04/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63921	10/04/23 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64032	10/04/23 13:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			63738	09/29/23 16:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	63538	09/28/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63575	09/29/23 16:50	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:52	SMC	EET MID

Client Sample ID: BH23-44

Date Collected: 09/22/23 13:13
Date Received: 09/26/23 13:02

Lab Sample ID: 890-5354-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	63673	10/04/23 12:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63921	10/04/23 14:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64032	10/04/23 14:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			63738	09/29/23 17:12	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63538	09/28/23 14:10	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63575	09/29/23 17:12	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:58	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: MOBLEY WATER RECYCLING 2

Job ID: 890-5354-1
SDG: 23E-04909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5354-1	BH23-46	Solid	09/22/23 12:57	09/26/23 13:02
890-5354-2	BH23-44	Solid	09/22/23 13:13	09/26/23 13:02

Page 483 of 572

Chain of Custody

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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 2 of 2

Project Manager:	Change Dixon	Bill to: (If different)	Solaris Rob Kirk
Company Name:	Venter	Company Name:	Solaris
Address:	on file	Address:	on file
City, State ZIP:	/	City, State ZIP:	cdixon@venter.ca
Phone:	/	Email:	

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:	Hobbs Water Recycling 2	Turn Around	
Project Number:	23E-04909 J	☒ Routine ☐ Rush	
Project Location:	Hobbs	Due Date:	9.30.23
Sampler's Name:	Ifevsavan Costafilho	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:	TNH007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.6
Total Containers:		Corrected Temperature:	2.4

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015 J	Cl
~~BH 23-46 6'~~	~~S~~	~~9.21.23~~	~~12:01~~	~~6'~~		~~1~~		~~X~~	~~X~~	~~X~~
~~BH 23-44 5'~~	~~V~~	~~V~~	~~12:23~~	~~5'~~		~~1~~		~~X~~	~~X~~	~~X~~
BH 23-46	S	9-22	1257	C		1		X	X	X
BH 23-44	S	9-22	1313	C		1		X	X	X

890-5354 Chain of Custody

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 Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		17:02 9-26	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc Ifevsavan Costafilho at dcostafilho@venter.ca

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10/5/2023

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5354-1
SDG Number: 23E-04909

Login Number: 5354
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5354-1
SDG Number: 23E-04909

Login Number: 5354
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 09/28/23 01:37 PM

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.	True	
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

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JOB DESCRIPTION

Mobley Water Recylcing 2
SDG NUMBER Mobley

JOB NUMBER

880-34008-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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my EOL

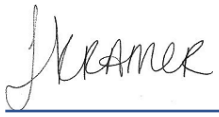
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 6
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 17
Lab Chronicle 20
Certification Summary 22
Method Summary 23
Sample Summary 24
Chain of Custody 25
Receipt Checklists 26

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Definitions/Glossary

Client: Vertex Job ID: 880-34008-1
Project/Site: Mobley Water Recylcing 2 SDG: Mobley

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Job ID: 880-34008-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-34008-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/3/2023 9:49 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.2°C

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34144-A-2-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-64287 and analytical batch 880-64327 was outside the upper control limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64287 and analytical batch 880-64327 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-63945 and analytical batch 880-64185 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-46 2' (880-34008-2) and BH23-48 0' (880-34008-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-64185/20), (CCV 880-64185/31), (CCV 880-64185/46) and (CCV 880-64185/5). Evidence of matrix interferences is not obvious.

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

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

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BH23-44 2'

Date Collected: 09/29/23 11:22
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/04/23 15:11	10/09/23 16:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/04/23 15:11	10/09/23 16:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*10/04/23 15:11*	*10/09/23 16:36*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*10/04/23 15:11*	*10/09/23 16:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/09/23 16:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			10/09/23 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		10/04/23 16:02	10/09/23 17:07	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		10/04/23 16:02	10/09/23 17:07	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		10/04/23 16:02	10/09/23 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*10/04/23 16:02*	*10/09/23 17:07*	*1*
o-Terphenyl	*105*		*70 - 130*	*10/04/23 16:02*	*10/09/23 17:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1720**		99.6		mg/Kg			10/06/23 21:02	20

Client Sample ID: BH23-46 2'

Date Collected: 09/29/23 11:45
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/04/23 15:11	10/09/23 16:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/04/23 15:11	10/09/23 16:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 15:11	10/09/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*10/04/23 15:11*	*10/09/23 16:56*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*10/04/23 15:11*	*10/09/23 16:56*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BH23-46 2'

Date Collected: 09/29/23 11:45
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/09/23 16:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/09/23 17:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/04/23 16:02	10/09/23 17:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/04/23 16:02	10/09/23 17:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/04/23 16:02	10/09/23 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*10/04/23 16:02*	*10/09/23 17:30*	*1*
o-Terphenyl	*116*		*70 - 130*	*10/04/23 16:02*	*10/09/23 17:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1270**		49.8		mg/Kg			10/06/23 16:02	10

Client Sample ID: BH23-47 0'

Date Collected: 09/29/23 12:21
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/04/23 15:11	10/09/23 17:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/04/23 15:11	10/09/23 17:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*10/04/23 15:11*	*10/09/23 17:17*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*10/04/23 15:11*	*10/09/23 17:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/09/23 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			10/09/23 17:52	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	<50.3	U	50.3		mg/Kg		10/04/23 16:02	10/09/23 17:52	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		10/04/23 16:02	10/09/23 17:52	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BH23-47 0'

Date Collected: 09/29/23 12:21
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/04/23 16:02	10/09/23 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*10/04/23 16:02*	*10/09/23 17:52*	*1*
o-Terphenyl	*87*		*70 - 130*	*10/04/23 16:02*	*10/09/23 17:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.4**		4.96		mg/Kg			10/06/23 16:09	1

Client Sample ID: BH23-48 0'

Date Collected: 09/29/23 12:32
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/04/23 15:11	10/09/23 17:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/04/23 15:11	10/09/23 17:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/04/23 15:11	10/09/23 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*10/04/23 15:11*	*10/09/23 17:37*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*10/04/23 15:11*	*10/09/23 17:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/09/23 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			10/09/23 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		10/04/23 16:02	10/09/23 18:14	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		10/04/23 16:02	10/09/23 18:14	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		10/04/23 16:02	10/09/23 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*10/04/23 16:02*	*10/09/23 18:14*	*1*
o-Terphenyl	*109*		*70 - 130*	*10/04/23 16:02*	*10/09/23 18:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98.4**		4.95		mg/Kg			10/06/23 16:29	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BG23-02 0.5'

Date Collected: 09/29/23 11:10
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34008-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/09/23 15:21	10/10/23 18:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/09/23 15:21	10/10/23 18:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*10/09/23 15:21*	*10/10/23 18:56*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*10/09/23 15:21*	*10/10/23 18:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/10/23 18:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/09/23 18:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/04/23 16:02	10/09/23 18:35	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		10/04/23 16:02	10/09/23 18:35	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/04/23 16:02	10/09/23 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*10/04/23 16:02*	*10/09/23 18:35*	*1*
o-Terphenyl	*90*		*70 - 130*	*10/04/23 16:02*	*10/09/23 18:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**288**		4.95		mg/Kg			10/06/23 16:35	1

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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)
880-33930-A-1-D MS	Matrix Spike	120	115
880-33930-A-1-E MSD	Matrix Spike Duplicate	114	101
880-34008-1	BH23-44 2'	96	76
880-34008-2	BH23-46 2'	81	98
880-34008-3	BH23-47 0'	84	91
880-34008-4	BH23-48 0'	92	81
880-34008-5	BG23-02 0.5'	107	96
880-34144-A-2-C MS	Matrix Spike	110	152 S1+
880-34144-A-2-D MSD	Matrix Spike Duplicate	100	102
LCS 880-63899/1-A	Lab Control Sample	109	110
LCS 880-64287/1-A	Lab Control Sample	97	108
LCSD 880-63899/2-A	Lab Control Sample Dup	113	110
LCSD 880-64287/2-A	Lab Control Sample Dup	99	110
MB 880-63899/5-A	Method Blank	72	97
MB 880-64287/5-A	Method Blank	118	142 S1+

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)
880-34008-1	BH23-44 2'	129	105
880-34008-2	BH23-46 2'	143 S1+	116
880-34008-3	BH23-47 0'	111	87
880-34008-4	BH23-48 0'	137 S1+	109
880-34008-5	BG23-02 0.5'	113	90
880-34009-A-2-D MS	Matrix Spike	127	94
880-34009-A-2-E MSD	Matrix Spike Duplicate	128	94
LCS 880-63945/2-A	Lab Control Sample	113	115
LCSD 880-63945/3-A	Lab Control Sample Dup	91	87
MB 880-63945/1-A	Method Blank	152 S1+	125

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63899/5-A
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/03/23 15:11	10/09/23 10:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/03/23 15:11	10/09/23 10:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/03/23 15:11	10/09/23 10:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/03/23 15:11	10/09/23 10:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/03/23 15:11	10/09/23 10:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/03/23 15:11	10/09/23 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*10/03/23 15:11*	*10/09/23 10:44*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*10/03/23 15:11*	*10/09/23 10:44*	*1*

Lab Sample ID: LCS 880-63899/1-A
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08863		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08855		mg/Kg		89	70 - 130
Toluene	0.100	0.08775		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1924		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09757		mg/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 880-63899/2-A
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63899

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09974		mg/Kg		100	70 - 130	12	35
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130	12	35
Toluene	0.100	0.09854		mg/Kg		99	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.2169		mg/Kg		108	70 - 130	12	35
o-Xylene	0.100	0.1094		mg/Kg		109	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-33930-A-1-D MS
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.08356		mg/Kg		84	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.07800		mg/Kg		78	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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

Lab Sample ID: 880-33930-A-1-D MS
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00199	U	0.0998	0.07616		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1664		mg/Kg		83	70 - 130
o-Xylene	<0.00199	U	0.0998	0.08428		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 880-33930-A-1-E MSD
Matrix: Solid
Analysis Batch: 64184

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.08707		mg/Kg		88	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.0990	0.07237		mg/Kg		73	70 - 130	7	35
Toluene	<0.00199	U	0.0990	0.07687		mg/Kg		78	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1501		mg/Kg		76	70 - 130	10	35
o-Xylene	<0.00199	U	0.0990	0.07612		mg/Kg		77	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-64287/5-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*10/09/23 15:21*	*10/10/23 12:31*	*1*
1,4-Difluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*10/09/23 15:21*	*10/10/23 12:31*	*1*

Lab Sample ID: LCS 880-64287/1-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09656		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.07509		mg/Kg		75	70 - 130
Toluene	0.100	0.08261		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1552		mg/Kg		78	70 - 130

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QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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

Lab Sample ID: LCS 880-64287/1-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64287

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.07179		mg/Kg		72	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-64287/2-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1211		mg/Kg		121	70 - 130	23	35
Ethylbenzene			0.100	0.08676		mg/Kg		87	70 - 130	14	35
Toluene			0.100	0.09560		mg/Kg		96	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1761		mg/Kg		88	70 - 130	13	35
o-Xylene			0.100	0.09494		mg/Kg		95	70 - 130	28	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-34144-A-2-C MS
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.1075		mg/Kg		108	70 - 130		
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.03960	F1	mg/Kg		40	70 - 130		
Toluene	<0.00199	U F1	0.0998	0.05826	F1	mg/Kg		58	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1466		mg/Kg		73	70 - 130		
o-Xylene	<0.00199	U	0.0998	0.07727		mg/Kg		77	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*152*	*S1+*	*70 - 130*

Lab Sample ID: 880-34144-A-2-D MSD
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08818		mg/Kg		88	70 - 130	20	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.06576	F1 F2	mg/Kg		65	70 - 130	50	35
Toluene	<0.00199	U F1	0.100	0.07606		mg/Kg		76	70 - 130	27	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1541		mg/Kg		77	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.08280		mg/Kg		82	70 - 130	7	35

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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

Lab Sample ID: 880-34144-A-2-D MSD
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64287

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-63945/1-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	152	S1+	70 - 130	10/04/23 11:52	10/09/23 09:00	1
o-Terphenyl	125		70 - 130	10/04/23 11:52	10/09/23 09:00	1

Lab Sample ID: LCS 880-63945/2-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63945

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	932.7		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	787.6		mg/Kg		79	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-63945/3-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63945

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	918.1		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	765.4		mg/Kg		77	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	87		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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

Lab Sample ID: 880-34009-A-2-D MS
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1047		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1066		mg/Kg		106	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: 880-34009-A-2-E MSD
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1073		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1073		mg/Kg		107	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63956/1-A
Matrix: Solid
Analysis Batch: 64135

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		mg/Kg			10/06/23 13:49	1

Lab Sample ID: LCS 880-63956/2-A
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	234.6		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-63956/3-A
Matrix: Solid
Analysis Batch: 64135

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	234.5		mg/Kg		94	90 - 110	0	20

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-33999-A-5-D MS
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	49.5		250	287.3		mg/Kg		95	90 - 110

Lab Sample ID: 880-33999-A-5-E MSD
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49.5		250	288.1		mg/Kg		96	90 - 110	0	20

Lab Sample ID: MB 880-63961/1-A
Matrix: Solid
Analysis Batch: 64136

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		mg/Kg			10/06/23 17:42	1

Lab Sample ID: LCS 880-63961/2-A
Matrix: Solid
Analysis Batch: 64136

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.1		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-63961/3-A
Matrix: Solid
Analysis Batch: 64136

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	238.3		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-33991-A-4-D MS
Matrix: Solid
Analysis Batch: 64136

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2300		1240	3496		mg/Kg		96	90 - 110

Lab Sample ID: 880-33991-A-4-E MSD
Matrix: Solid
Analysis Batch: 64136

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2300		1240	3502		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

GC VOA

Prep Batch: 63899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	5035	
880-34008-2	BH23-46 2'	Total/NA	Solid	5035	
880-34008-3	BH23-47 0'	Total/NA	Solid	5035	
880-34008-4	BH23-48 0'	Total/NA	Solid	5035	
MB 880-63899/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63899/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63899/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33930-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-33930-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	8021B	63899
880-34008-2	BH23-46 2'	Total/NA	Solid	8021B	63899
880-34008-3	BH23-47 0'	Total/NA	Solid	8021B	63899
880-34008-4	BH23-48 0'	Total/NA	Solid	8021B	63899
MB 880-63899/5-A	Method Blank	Total/NA	Solid	8021B	63899
LCS 880-63899/1-A	Lab Control Sample	Total/NA	Solid	8021B	63899
LCSD 880-63899/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63899
880-33930-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	63899
880-33930-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63899

Prep Batch: 64287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-5	BG23-02 0.5'	Total/NA	Solid	5035	
MB 880-64287/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64287/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64287/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34144-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-34144-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	Total BTEX	
880-34008-2	BH23-46 2'	Total/NA	Solid	Total BTEX	
880-34008-3	BH23-47 0'	Total/NA	Solid	Total BTEX	
880-34008-4	BH23-48 0'	Total/NA	Solid	Total BTEX	
880-34008-5	BG23-02 0.5'	Total/NA	Solid	Total BTEX	

Analysis Batch: 64327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-5	BG23-02 0.5'	Total/NA	Solid	8021B	64287
MB 880-64287/5-A	Method Blank	Total/NA	Solid	8021B	64287
LCS 880-64287/1-A	Lab Control Sample	Total/NA	Solid	8021B	64287
LCSD 880-64287/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64287
880-34144-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	64287
880-34144-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64287

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

GC Semi VOA

Prep Batch: 63945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	8015NM Prep	
880-34008-2	BH23-46 2'	Total/NA	Solid	8015NM Prep	
880-34008-3	BH23-47 0'	Total/NA	Solid	8015NM Prep	
880-34008-4	BH23-48 0'	Total/NA	Solid	8015NM Prep	
880-34008-5	BG23-02 0.5'	Total/NA	Solid	8015NM Prep	
MB 880-63945/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63945/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34009-A-2-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34009-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	8015B NM	63945
880-34008-2	BH23-46 2'	Total/NA	Solid	8015B NM	63945
880-34008-3	BH23-47 0'	Total/NA	Solid	8015B NM	63945
880-34008-4	BH23-48 0'	Total/NA	Solid	8015B NM	63945
880-34008-5	BG23-02 0.5'	Total/NA	Solid	8015B NM	63945
MB 880-63945/1-A	Method Blank	Total/NA	Solid	8015B NM	63945
LCS 880-63945/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63945
LCSD 880-63945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63945
880-34009-A-2-D MS	Matrix Spike	Total/NA	Solid	8015B NM	63945
880-34009-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63945

Analysis Batch: 64350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Total/NA	Solid	8015 NM	
880-34008-2	BH23-46 2'	Total/NA	Solid	8015 NM	
880-34008-3	BH23-47 0'	Total/NA	Solid	8015 NM	
880-34008-4	BH23-48 0'	Total/NA	Solid	8015 NM	
880-34008-5	BG23-02 0.5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-2	BH23-46 2'	Soluble	Solid	DI Leach	
880-34008-3	BH23-47 0'	Soluble	Solid	DI Leach	
880-34008-4	BH23-48 0'	Soluble	Solid	DI Leach	
880-34008-5	BG23-02 0.5'	Soluble	Solid	DI Leach	
MB 880-63956/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63956/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63956/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33999-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33999-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 63961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Soluble	Solid	DI Leach	
MB 880-63961/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63961/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

HPLC/IC (Continued)

Leach Batch: 63961 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-63961/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33991-A-4-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33991-A-4-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-2	BH23-46 2'	Soluble	Solid	300.0	63956
880-34008-3	BH23-47 0'	Soluble	Solid	300.0	63956
880-34008-4	BH23-48 0'	Soluble	Solid	300.0	63956
880-34008-5	BG23-02 0.5'	Soluble	Solid	300.0	63956
MB 880-63956/1-A	Method Blank	Soluble	Solid	300.0	63956
LCS 880-63956/2-A	Lab Control Sample	Soluble	Solid	300.0	63956
LCSD 880-63956/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63956
880-33999-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	63956
880-33999-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63956

Analysis Batch: 64136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34008-1	BH23-44 2'	Soluble	Solid	300.0	63961
MB 880-63961/1-A	Method Blank	Soluble	Solid	300.0	63961
LCS 880-63961/2-A	Lab Control Sample	Soluble	Solid	300.0	63961
LCSD 880-63961/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63961
880-33991-A-4-D MS	Matrix Spike	Soluble	Solid	300.0	63961
880-33991-A-4-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63961

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BH23-44 2'

Lab Sample ID: 880-34008-1
Matrix: Solid
Date Collected: 09/29/23 11:22
Date Received: 10/03/23 09:49

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	63899	10/04/23 15:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64184	10/09/23 16:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64317	10/09/23 16:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			64350	10/09/23 17:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	63945	10/04/23 16:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 17:07	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63961	10/04/23 16:10	AG	EET MID
Soluble	Analysis	300.0		20			64136	10/06/23 21:02	SMC	EET MID

Client Sample ID: BH23-46 2'

Lab Sample ID: 880-34008-2
Matrix: Solid
Date Collected: 09/29/23 11:45
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63899	10/04/23 15:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64184	10/09/23 16:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64317	10/09/23 16:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			64350	10/09/23 17:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	63945	10/04/23 16:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 17:30	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		10			64135	10/06/23 16:02	SMC	EET MID

Client Sample ID: BH23-47 0'

Lab Sample ID: 880-34008-3
Matrix: Solid
Date Collected: 09/29/23 12:21
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63899	10/04/23 15:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64184	10/09/23 17:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64317	10/09/23 17:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			64350	10/09/23 17:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63945	10/04/23 16:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 17:52	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:09	SMC	EET MID

Client Sample ID: BH23-48 0'

Lab Sample ID: 880-34008-4
Matrix: Solid
Date Collected: 09/29/23 12:32
Date Received: 10/03/23 09:49

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	63899	10/04/23 15:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64184	10/09/23 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64317	10/09/23 17:37	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Client Sample ID: BH23-48 0'

Lab Sample ID: 880-34008-4
Matrix: Solid
Date Collected: 09/29/23 12:32
Date Received: 10/03/23 09:49

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			64350	10/09/23 18:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	63945	10/04/23 16:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 18:14	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:29	SMC	EET MID

Client Sample ID: BG23-02 0.5'

Lab Sample ID: 880-34008-5
Matrix: Solid
Date Collected: 09/29/23 11:10
Date Received: 10/03/23 09:49

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	64287	10/09/23 15:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64327	10/10/23 18:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64317	10/10/23 18:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			64350	10/09/23 18:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63945	10/04/23 16:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 18:35	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:35	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34008-1
SDG: Mobley

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34008-1	BH23-44 2'	Solid	09/29/23 11:22	10/03/23 09:49
880-34008-2	BH23-46 2'	Solid	09/29/23 11:45	10/03/23 09:49
880-34008-3	BH23-47 0'	Solid	09/29/23 12:21	10/03/23 09:49
880-34008-4	BH23-48 0'	Solid	09/29/23 12:32	10/03/23 09:49
880-34008-5	BG23-02 0.5'	Solid	09/29/23 11:10	10/03/23 09:49

Page 510 of 572

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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: 880-34008 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris - Rob Kirk
Company Name	Vertex	Company Name:	Solaris
Address:	on file	Address.	on file
City, State ZIP:	/	City, State ZIP:	cdixon@vertex.ca
Phone:		Email.	

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:	Mobley Water Recycling 2	Turn Around	
Project Number:	23E-04909	☒ Routine ☐ Rush	
Project Location:	Mobley	Due Date: 10.10.23	
Sampler's Name:	Lfeussavan Costa	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:	TNM007
Cooler Custody Seals.	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading	0
Total Containers:		Corrected Temperature:	-0.2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 8015	Cl
BH23-44 2'	Soil	9.29.23	11:22	2'		1				
BH23-46 2'			11:45	2'		2				
BH23-47 0'			12:21	0'		3				
BH23-48 0'			12:32	0'		4				
BH23-02 .5'			11:10	5'		5				

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 Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Lfeussavan		10-3 9:49	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc deussavan at dcostafilho@vertex.ca

Received by OCD: 7/31/2024 4:04:52 PM
Released to Imaging: 3/12/2025 9:46:11 AM
10/11/2023

Login Sample Receipt Checklist

Client: Vertex

Job Number: 880-34008-1
SDG Number: Mobley

Login Number: 34008
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 10/11/2023 1:40:24 PM

JOB DESCRIPTION

Mobley Water Recylcing 2
SDG NUMBER Mobley

JOB NUMBER

880-34009-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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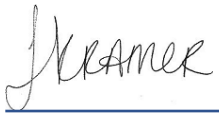
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Client: Vertex
Project/Site: Mobley Water Recylcing 2

Laboratory Job ID: 880-34009-1
SDG: Mobley

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 11
QC Sample Results 12
QC Association Summary 21
Lab Chronicle 24
Certification Summary 26
Method Summary 27
Sample Summary 28
Chain of Custody 29
Receipt Checklists 30

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Definitions/Glossary

Client: Vertex Job ID: 880-34009-1
Project/Site: Mobley Water Recylcing 2 SDG: Mobley

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Job ID: 880-34009-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-34009-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/3/2023 9:49 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.2°C

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-64080 recovered under the lower control limit for Ethylbenzene, Toluene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.>(CCV 880-64080/64)

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64082 and analytical batch 880-64080 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63806 and 880-64082 and analytical batch 880-64080 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63929 and analytical batch 880-64194 was outside the control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-64194 recovered above the upper control limit for Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-64194/51).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-64197 and analytical batch 880-64194 was outside the control limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-64197 and analytical batch 880-64194 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-34144-A-2-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-64287 and analytical batch 880-64327 was outside the upper control limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64287 and analytical batch 880-64327 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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Case Narrative

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Job ID: 880-34009-1 (Continued)

Laboratory: Eurofins Midland (Continued)

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 880-63945 and analytical batch 880-64185 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: BH23-47 2' (880-34009-1), BH23-50 0' (880-34009-4) and BH23-51 0' (880-34009-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-64185/20) and (CCV 880-64185/5). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-47 2'

Date Collected: 10/02/23 10:25
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 04:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 04:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 04:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/06/23 08:56	10/08/23 04:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/06/23 08:56	10/08/23 04:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*10/06/23 08:56*	*10/08/23 04:48*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*10/06/23 08:56*	*10/08/23 04:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/08/23 04:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/09/23 12:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/04/23 11:52	10/09/23 12:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/04/23 11:52	10/09/23 12:43	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/04/23 11:52	10/09/23 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*10/04/23 11:52*	*10/09/23 12:43*	*1*
o-Terphenyl	*105*		*70 - 130*	*10/04/23 11:52*	*10/09/23 12:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.1**		5.02		mg/Kg			10/06/23 16:42	1

Client Sample ID: BH23-48 2'

Date Collected: 10/02/23 10:10
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:09	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:09	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/06/23 08:56	10/08/23 05:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/06/23 08:56	10/08/23 05:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:09*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:09*	*1*

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-48 2'

Date Collected: 10/02/23 10:10
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/08/23 05:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/09/23 11:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		10/04/23 11:52	10/09/23 11:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/04/23 11:52	10/09/23 11:36	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/04/23 11:52	10/09/23 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*10/04/23 11:52*	*10/09/23 11:36*	*1*
o-Terphenyl	*98*		*70 - 130*	*10/04/23 11:52*	*10/09/23 11:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33.6**		5.04		mg/Kg			10/06/23 16:49	1

Client Sample ID: BH23-49 0'

Date Collected: 10/02/23 10:42
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/09/23 15:21	10/10/23 18:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/09/23 15:21	10/10/23 18:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/09/23 15:21	10/10/23 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*10/09/23 15:21*	*10/10/23 18:36*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*10/09/23 15:21*	*10/10/23 18:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/10/23 18:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/09/23 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 13:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 13:05	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-49 0'

Date Collected: 10/02/23 10:42
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*10/04/23 11:52*	*10/09/23 13:05*	*1*
o-Terphenyl	*95*		*70 - 130*	*10/04/23 11:52*	*10/09/23 13:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**64.8**		5.00		mg/Kg			10/06/23 16:55	1

Client Sample ID: BH23-50 0'

Date Collected: 10/02/23 10:53
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 13:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 13:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 13:59	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		10/09/23 09:34	10/10/23 13:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		10/09/23 09:34	10/10/23 13:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/09/23 09:34*	*10/10/23 13:59*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*10/09/23 09:34*	*10/10/23 13:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/10/23 13:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			10/09/23 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/04/23 11:52	10/09/23 13:27	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		10/04/23 11:52	10/09/23 13:27	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/04/23 11:52	10/09/23 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*10/04/23 11:52*	*10/09/23 13:27*	*1*
o-Terphenyl	*112*		*70 - 130*	*10/04/23 11:52*	*10/09/23 13:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.4**		4.99		mg/Kg			10/06/23 17:02	1

Client Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-51 0'

Date Collected: 10/02/23 11:13
Date Received: 10/03/23 09:49

Lab Sample ID: 880-34009-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/04/23 14:30	10/09/23 22:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/04/23 14:30	10/09/23 22:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/04/23 14:30	10/09/23 22:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/04/23 14:30	10/09/23 22:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/04/23 14:30	10/09/23 22:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/04/23 14:30	10/09/23 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*10/04/23 14:30*	*10/09/23 22:18*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*10/04/23 14:30*	*10/09/23 22:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/09/23 22:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			10/09/23 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		10/04/23 11:52	10/09/23 13:49	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		10/04/23 11:52	10/09/23 13:49	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		10/04/23 11:52	10/09/23 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*10/04/23 11:52*	*10/09/23 13:49*	*1*
o-Terphenyl	*114*		*70 - 130*	*10/04/23 11:52*	*10/09/23 13:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**428**		25.3		mg/Kg			10/06/23 17:09	5

Surrogate Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-34009-1	BH23-47 2'	83	102
880-34009-2	BH23-48 2'	98	108
880-34009-3	BH23-49 0'	112	116
880-34009-4	BH23-50 0'	101	78
880-34009-5	BH23-51 0'	101	73
880-34081-A-1-A MS	Matrix Spike	93	106
880-34081-A-1-B MSD	Matrix Spike Duplicate	102	110
880-34125-A-1-C MS	Matrix Spike	125	110
880-34125-A-1-D MSD	Matrix Spike Duplicate	114	113
880-34144-A-2-C MS	Matrix Spike	110	152 S1+
880-34144-A-2-D MSD	Matrix Spike Duplicate	100	102
890-5379-A-1-E MS	Matrix Spike	111	91
890-5379-A-1-F MSD	Matrix Spike Duplicate	104	94
LCS 880-63929/1-A	Lab Control Sample	116	109
LCS 880-64082/1-A	Lab Control Sample	104	102
LCS 880-64197/1-A	Lab Control Sample	114	97
LCS 880-64287/1-A	Lab Control Sample	97	108
LCSD 880-63929/2-A	Lab Control Sample Dup	110	104
LCSD 880-64082/2-A	Lab Control Sample Dup	108	102
LCSD 880-64197/2-A	Lab Control Sample Dup	112	79
LCSD 880-64287/2-A	Lab Control Sample Dup	99	110
MB 880-63806/5-A	Method Blank	123	134 S1+
MB 880-63929/5-A	Method Blank	66 S1-	95
MB 880-64082/5-A	Method Blank	120	148 S1+
MB 880-64197/5-A	Method Blank	68 S1-	87
MB 880-64287/5-A	Method Blank	118	142 S1+

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-34009-1	BH23-47 2'	136 S1+	105
880-34009-2	BH23-48 2'	124	98
880-34009-2 MS	BH23-48 2'	127	94
880-34009-2 MSD	BH23-48 2'	128	94
880-34009-3	BH23-49 0'	119	95
880-34009-4	BH23-50 0'	140 S1+	112
880-34009-5	BH23-51 0'	143 S1+	114
LCS 880-63945/2-A	Lab Control Sample	113	115
LCSD 880-63945/3-A	Lab Control Sample Dup	91	87
MB 880-63945/1-A	Method Blank	152 S1+	125

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63806/5-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*10/02/23 16:41*	*10/07/23 11:50*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*10/02/23 16:41*	*10/07/23 11:50*	*1*

Lab Sample ID: MB 880-63929/5-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63929

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/04/23 09:20	10/09/23 12:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/04/23 09:20	10/09/23 12:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/04/23 09:20	10/09/23 12:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/04/23 09:20	10/09/23 12:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/04/23 09:20	10/09/23 12:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/04/23 09:20	10/09/23 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*10/04/23 09:20*	*10/09/23 12:21*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*10/04/23 09:20*	*10/09/23 12:21*	*1*

Lab Sample ID: LCS 880-63929/1-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1106		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130
Toluene	0.100	0.1155		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2234		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1117		mg/Kg		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-63929/2-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63929

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1087		mg/Kg		109	70 - 130	2	35

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: LCSD 880-63929/2-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63929

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene			0.100	0.1023		mg/Kg		102	70 - 130	11	35
Toluene			0.100	0.1091		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2050		mg/Kg		102	70 - 130	9	35
o-Xylene			0.100	0.1114		mg/Kg		111	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-5379-A-1-E MS
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63929

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.09173		mg/Kg		92	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.1020		mg/Kg		102	70 - 130
Toluene	<0.00199	U	0.0998	0.1103		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1985		mg/Kg		99	70 - 130
o-Xylene	<0.00199	U	0.0998	0.1027		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 890-5379-A-1-F MSD
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63929

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1114		mg/Kg		111	70 - 130	19	35
Ethylbenzene	<0.00199	U	0.100	0.1050		mg/Kg		105	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.1111		mg/Kg		111	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2020		mg/Kg		101	70 - 130	2	35
o-Xylene	<0.00199	U	0.100	0.1001		mg/Kg		100	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 880-64082/5-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/06/23 08:56	10/07/23 23:26	1

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: MB 880-64082/5-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*10/06/23 08:56*	*10/07/23 23:26*	*1*
1,4-Difluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*10/06/23 08:56*	*10/07/23 23:26*	*1*

Lab Sample ID: LCS 880-64082/1-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1137		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1092		mg/Kg		109	70 - 130
Toluene	0.100	0.1050		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2305		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1099		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-64082/2-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1095		mg/Kg		110	70 - 130	4	35
Ethylbenzene	0.100	0.09641		mg/Kg		96	70 - 130	12	35
Toluene	0.100	0.09976		mg/Kg		100	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2241		mg/Kg		112	70 - 130	3	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-34081-A-1-A MS
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.09296		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U F1	0.0998	0.06907	F1	mg/Kg		69	70 - 130
Toluene	<0.00199	U	0.0998	0.07741		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1655		mg/Kg		83	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07898		mg/Kg		79	70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: 880-34081-A-1-A MS
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64082

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-34081-A-1-B MSD
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09153		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.00199	U F1	0.100	0.07093		mg/Kg		71	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.07894		mg/Kg		79	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1677		mg/Kg		84	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.08099		mg/Kg		81	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: MB 880-64197/5-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64197

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 01:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 01:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 01:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/09/23 09:34	10/10/23 01:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/09/23 09:34	10/10/23 01:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/09/23 09:34	10/10/23 01:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	10/09/23 09:34	10/10/23 01:45	1
1,4-Difluorobenzene (Surr)	87		70 - 130	10/09/23 09:34	10/10/23 01:45	1

Lab Sample ID: LCS 880-64197/1-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64197

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08681		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.07876		mg/Kg		79	70 - 130
Toluene	0.100	0.08481		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1616		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08910		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130

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QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: LCS 880-64197/1-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64197

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-64197/2-A
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64197

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08459		mg/Kg		85	70 - 130	3	35
Ethylbenzene			0.100	0.08601		mg/Kg		86	70 - 130	9	35
Toluene			0.100	0.08333		mg/Kg		83	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1652		mg/Kg		83	70 - 130	2	35
o-Xylene			0.100	0.08903		mg/Kg		89	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*

Lab Sample ID: 880-34125-A-1-C MS
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64197

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.0998	0.07526		mg/Kg		75	70 - 130		
Ethylbenzene	<0.00201	U F1	0.0998	0.06268	F1	mg/Kg		63	70 - 130		
Toluene	<0.00201	U	0.0998	0.07638		mg/Kg		77	70 - 130		
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1204	F1	mg/Kg		60	70 - 130		
o-Xylene	<0.00201	U F1	0.0998	0.06684	F1	mg/Kg		67	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-34125-A-1-D MSD
Matrix: Solid
Analysis Batch: 64194

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64197

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.08729		mg/Kg		88	70 - 130	15	35
Ethylbenzene	<0.00201	U F1	0.0996	0.05680	F1	mg/Kg		57	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.07070		mg/Kg		71	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1060	F1	mg/Kg		53	70 - 130	13	35
o-Xylene	<0.00201	U F1	0.0996	0.05599	F1	mg/Kg		56	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: MB 880-64287/5-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/09/23 15:21	10/10/23 12:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/09/23 15:21	10/10/23 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*10/09/23 15:21*	*10/10/23 12:31*	*1*
1,4-Difluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*10/09/23 15:21*	*10/10/23 12:31*	*1*

Lab Sample ID: LCS 880-64287/1-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64287

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09656		mg/Kg		97	70 - 130		
Ethylbenzene			0.100	0.07509		mg/Kg		75	70 - 130		
Toluene			0.100	0.08261		mg/Kg		83	70 - 130		
m-Xylene & p-Xylene			0.200	0.1552		mg/Kg		78	70 - 130		
o-Xylene			0.100	0.07179		mg/Kg		72	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-64287/2-A
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64287

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1211		mg/Kg		121	70 - 130	23	35
Ethylbenzene			0.100	0.08676		mg/Kg		87	70 - 130	14	35
Toluene			0.100	0.09560		mg/Kg		96	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.1761		mg/Kg		88	70 - 130	13	35
o-Xylene			0.100	0.09494		mg/Kg		95	70 - 130	28	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 880-34144-A-2-C MS
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.1075		mg/Kg		108	70 - 130		
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.03960	F1	mg/Kg		40	70 - 130		

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: 880-34144-A-2-C MS
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	<0.00199	U F1	0.0998	0.05826	F1	mg/Kg		58	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1466		mg/Kg		73	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07727		mg/Kg		77	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*152*	*S1+*	*70 - 130*

Lab Sample ID: 880-34144-A-2-D MSD
Matrix: Solid
Analysis Batch: 64327

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64287

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08818		mg/Kg		88	70 - 130	20	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.06576	F1 F2	mg/Kg		65	70 - 130	50	35
Toluene	<0.00199	U F1	0.100	0.07606		mg/Kg		76	70 - 130	27	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1541		mg/Kg		77	70 - 130	5	35
o-Xylene	<0.00199	U	0.100	0.08280		mg/Kg		82	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-63945/1-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/04/23 11:52	10/09/23 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*10/04/23 11:52*	*10/09/23 09:00*	*1*
o-Terphenyl	*125*		*70 - 130*	*10/04/23 11:52*	*10/09/23 09:00*	*1*

Lab Sample ID: LCS 880-63945/2-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	932.7		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	787.6		mg/Kg		79	70 - 130

Eurofins Midland

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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

Lab Sample ID: LCS 880-63945/2-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63945

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-63945/3-A
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63945

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	918.1		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	765.4		mg/Kg		77	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 880-34009-2 MS
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: BH23-48 2'
Prep Type: Total/NA
Prep Batch: 63945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1047		mg/Kg		103	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1066		mg/Kg		106	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 880-34009-2 MSD
Matrix: Solid
Analysis Batch: 64185

Client Sample ID: BH23-48 2'
Prep Type: Total/NA
Prep Batch: 63945

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1073		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	1073		mg/Kg		107	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	94		70 - 130

QC Sample Results

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63956/1-A
Matrix: Solid
Analysis Batch: 64135

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		mg/Kg			10/06/23 13:49	1

Lab Sample ID: LCS 880-63956/2-A
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	234.6		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-63956/3-A
Matrix: Solid
Analysis Batch: 64135

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	234.5		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-33999-A-5-D MS
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	49.5		250	287.3		mg/Kg		95	90 - 110		

Lab Sample ID: 880-33999-A-5-E MSD
Matrix: Solid
Analysis Batch: 64135

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	49.5		250	288.1		mg/Kg		96	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

GC VOA

Prep Batch: 63806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63806/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 63929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-5	BH23-51 0'	Total/NA	Solid	5035	
MB 880-63929/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63929/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63929/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5379-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-5379-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	8021B	64082
880-34009-2	BH23-48 2'	Total/NA	Solid	8021B	64082
MB 880-63806/5-A	Method Blank	Total/NA	Solid	8021B	63806
MB 880-64082/5-A	Method Blank	Total/NA	Solid	8021B	64082
LCS 880-64082/1-A	Lab Control Sample	Total/NA	Solid	8021B	64082
LCSD 880-64082/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64082
880-34081-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64082
880-34081-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64082

Prep Batch: 64082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	5035	
880-34009-2	BH23-48 2'	Total/NA	Solid	5035	
MB 880-64082/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64082/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64082/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34081-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34081-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-4	BH23-50 0'	Total/NA	Solid	8021B	64197
880-34009-5	BH23-51 0'	Total/NA	Solid	8021B	63929
MB 880-63929/5-A	Method Blank	Total/NA	Solid	8021B	63929
MB 880-64197/5-A	Method Blank	Total/NA	Solid	8021B	64197
LCS 880-63929/1-A	Lab Control Sample	Total/NA	Solid	8021B	63929
LCS 880-64197/1-A	Lab Control Sample	Total/NA	Solid	8021B	64197
LCSD 880-63929/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63929
LCSD 880-64197/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64197
880-34125-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	64197
880-34125-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64197
890-5379-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	63929
890-5379-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63929

Prep Batch: 64197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-4	BH23-50 0'	Total/NA	Solid	5035	
MB 880-64197/5-A	Method Blank	Total/NA	Solid	5035	

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

GC VOA (Continued)

Prep Batch: 64197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-64197/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64197/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34125-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-34125-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	Total BTEX	
880-34009-2	BH23-48 2'	Total/NA	Solid	Total BTEX	
880-34009-3	BH23-49 0'	Total/NA	Solid	Total BTEX	
880-34009-4	BH23-50 0'	Total/NA	Solid	Total BTEX	
880-34009-5	BH23-51 0'	Total/NA	Solid	Total BTEX	

Prep Batch: 64287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-3	BH23-49 0'	Total/NA	Solid	5035	
MB 880-64287/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64287/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64287/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34144-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-34144-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-3	BH23-49 0'	Total/NA	Solid	8021B	64287
MB 880-64287/5-A	Method Blank	Total/NA	Solid	8021B	64287
LCS 880-64287/1-A	Lab Control Sample	Total/NA	Solid	8021B	64287
LCSD 880-64287/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64287
880-34144-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	64287
880-34144-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64287

GC Semi VOA

Prep Batch: 63945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	8015NM Prep	
880-34009-2	BH23-48 2'	Total/NA	Solid	8015NM Prep	
880-34009-3	BH23-49 0'	Total/NA	Solid	8015NM Prep	
880-34009-4	BH23-50 0'	Total/NA	Solid	8015NM Prep	
880-34009-5	BH23-51 0'	Total/NA	Solid	8015NM Prep	
MB 880-63945/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63945/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34009-2 MS	BH23-48 2'	Total/NA	Solid	8015NM Prep	
880-34009-2 MSD	BH23-48 2'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	8015B NM	63945
880-34009-2	BH23-48 2'	Total/NA	Solid	8015B NM	63945
880-34009-3	BH23-49 0'	Total/NA	Solid	8015B NM	63945

QC Association Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

GC Semi VOA (Continued)

Analysis Batch: 64185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-4	BH23-50 0'	Total/NA	Solid	8015B NM	63945
880-34009-5	BH23-51 0'	Total/NA	Solid	8015B NM	63945
MB 880-63945/1-A	Method Blank	Total/NA	Solid	8015B NM	63945
LCS 880-63945/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63945
LCSD 880-63945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63945
880-34009-2 MS	BH23-48 2'	Total/NA	Solid	8015B NM	63945
880-34009-2 MSD	BH23-48 2'	Total/NA	Solid	8015B NM	63945

Analysis Batch: 64348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Total/NA	Solid	8015 NM	
880-34009-2	BH23-48 2'	Total/NA	Solid	8015 NM	
880-34009-3	BH23-49 0'	Total/NA	Solid	8015 NM	
880-34009-4	BH23-50 0'	Total/NA	Solid	8015 NM	
880-34009-5	BH23-51 0'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Soluble	Solid	DI Leach	
880-34009-2	BH23-48 2'	Soluble	Solid	DI Leach	
880-34009-3	BH23-49 0'	Soluble	Solid	DI Leach	
880-34009-4	BH23-50 0'	Soluble	Solid	DI Leach	
880-34009-5	BH23-51 0'	Soluble	Solid	DI Leach	
MB 880-63956/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63956/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63956/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33999-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33999-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 64135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-34009-1	BH23-47 2'	Soluble	Solid	300.0	63956
880-34009-2	BH23-48 2'	Soluble	Solid	300.0	63956
880-34009-3	BH23-49 0'	Soluble	Solid	300.0	63956
880-34009-4	BH23-50 0'	Soluble	Solid	300.0	63956
880-34009-5	BH23-51 0'	Soluble	Solid	300.0	63956
MB 880-63956/1-A	Method Blank	Soluble	Solid	300.0	63956
LCS 880-63956/2-A	Lab Control Sample	Soluble	Solid	300.0	63956
LCSD 880-63956/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63956
880-33999-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	63956
880-33999-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63956

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-47 2'

Lab Sample ID: 880-34009-1
Matrix: Solid
Date Collected: 10/02/23 10:25
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 04:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64284	10/08/23 04:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			64348	10/09/23 12:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	63945	10/04/23 11:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 12:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:42	SMC	EET MID

Client Sample ID: BH23-48 2'

Lab Sample ID: 880-34009-2
Matrix: Solid
Date Collected: 10/02/23 10:10
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 05:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64284	10/08/23 05:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			64348	10/09/23 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	63945	10/04/23 11:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 11:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:49	SMC	EET MID

Client Sample ID: BH23-49 0'

Lab Sample ID: 880-34009-3
Matrix: Solid
Date Collected: 10/02/23 10:42
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	64287	10/09/23 15:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64327	10/10/23 18:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64284	10/10/23 18:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			64348	10/09/23 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	63945	10/04/23 11:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 13:05	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 16:55	SMC	EET MID

Client Sample ID: BH23-50 0'

Lab Sample ID: 880-34009-4
Matrix: Solid
Date Collected: 10/02/23 10:53
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	64197	10/09/23 09:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64194	10/10/23 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64284	10/10/23 13:59	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Client Sample ID: BH23-50 0'

Lab Sample ID: 880-34009-4
Matrix: Solid
Date Collected: 10/02/23 10:53
Date Received: 10/03/23 09:49

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			64348	10/09/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63945	10/04/23 11:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		1			64135	10/06/23 17:02	SMC	EET MID

Client Sample ID: BH23-51 0'

Lab Sample ID: 880-34009-5
Matrix: Solid
Date Collected: 10/02/23 11:13
Date Received: 10/03/23 09:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63929	10/04/23 14:30	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64194	10/09/23 22:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64284	10/09/23 22:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			64348	10/09/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	63945	10/04/23 11:52	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64185	10/09/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	63956	10/04/23 16:07	AG	EET MID
Soluble	Analysis	300.0		5			64135	10/06/23 17:09	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: Mobley Water Recylcing 2

Job ID: 880-34009-1
SDG: Mobley

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-34009-1	BH23-47 2'	Solid	10/02/23 10:25	10/03/23 09:49
880-34009-2	BH23-48 2'	Solid	10/02/23 10:10	10/03/23 09:49
880-34009-3	BH23-49 0'	Solid	10/02/23 10:42	10/03/23 09:49
880-34009-4	BH23-50 0'	Solid	10/02/23 10:53	10/03/23 09:49
880-34009-5	BH23-51 0'	Solid	10/02/23 11:13	10/03/23 09:49

Page 540 of 572

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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

880-34009 Chain of Custody

10/11/2023

www.xenco.com Page 1 of 1

Project Manager:	Chrisse Lyxon	Bill to: (if different)	Solaris - Rob Link
Company Name:	on file	Company Name:	Solaris
Address:	/	Address:	on file
City, State ZIP:		City, State ZIP:	clyxon@ventex.ca
Phone:		Email:	

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:	Mobley Water Recycling	Turn Around	
Project Number:	23E-04909	☑ Routine ☐ Rush	
Project Location:	Mobley	Due Date	10.20.23
Sampler's Name:	Yesenia Castillo	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:	TNM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	0	
Total Containers:		Corrected Temperature:	-0.2	

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	TPH 8015	Cl	Sample Comments
BH23-47 2'	Soil	10.02.23	10:25	2'		1					
BH23-48 2'			10:10	2'							
BH23-49 0'			10:42	0'							
BH23-50 0'			10:53	0'							
BH23-51 0'	↓	↓	11:13	0'		↓		↓	↓	↓	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Yesenia Castillo		10/3 949	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

please cc dcostafilho@ventex.ca

Page 29 of 30

Received by OCD: 7/31/2024 4:04:52 PM

Released to Imaging: 3/12/2025 9:46:11 AM

Login Sample Receipt Checklist

Client: Vertex

Job Number: 880-34009-1
SDG Number: Mobley

Login Number: 34009
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 10/10/2023 1:13:57 PM

JOB DESCRIPTION

MOBLEY WATER RECYCLING
SDG NUMBER 23 04 909

JOB NUMBER

890-5406-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 3/12/2025 9:46:11 AM

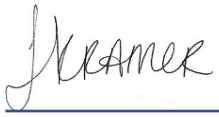
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
10/10/2023 1:13:57 PM

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

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Laboratory Job ID: 890-5406-1
SDG: 23 04 909

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Client Sample Results 7
Surrogate Summary 10
QC Sample Results 11
QC Association Summary 15
Lab Chronicle 17
Certification Summary 19
Method Summary 20
Sample Summary 21
Chain of Custody 22
Receipt Checklists 23

Definitions/Glossary

Client: Vertex Job ID: 890-5406-1
Project/Site: MOBLEY WATER RECYCLING SDG: 23 04 909

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Job ID: 890-5406-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5406-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/4/2023 8:40 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 5.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH23-49 2' (890-5406-1), BH23-51 2' (890-5406-2), BH23-01 4.5' (890-5406-3) and BH23-12 5' (890-5406-4).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-64080 recovered under the lower control limit for Ethylbenzene, Toluene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.>(CCV 880-64080/64)

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-64082 and analytical batch 880-64080 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63806 and 880-64082 and analytical batch 880-64080 was outside the upper control limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-5407-A-4-C MS) and (890-5407-A-4-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-64055 and analytical batch 880-64187 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-64009 and analytical batch 880-64140 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.The associated samples are: BH23-49 2' (890-5406-1), BH23-51 2' (890-5406-2), BH23-01 4.5' (890-5406-3), BH23-12 5' (890-5406-4), (890-5406-A-1-B MS) and (890-5406-A-1-C MSD).

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

Case Narrative

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Job ID: 890-5406-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Client Sample ID: BH23-49 2'

Date Collected: 10/03/23 10:47
Date Received: 10/04/23 08:40

Lab Sample ID: 890-5406-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:29	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:29	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:29	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/06/23 08:56	10/08/23 05:29	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/06/23 08:56	10/08/23 05:29	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:29*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			10/08/23 05:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			10/09/23 12:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		10/05/23 17:18	10/09/23 12:43	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		10/05/23 17:18	10/09/23 12:43	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		10/05/23 17:18	10/09/23 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*10/05/23 17:18*	*10/09/23 12:43*	*1*
o-Terphenyl	*126*		*70 - 130*	*10/05/23 17:18*	*10/09/23 12:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**172**	**F1**	5.03		mg/Kg			10/07/23 13:53	1

Client Sample ID: BH23-51 2'

Date Collected: 10/03/23 10:10
Date Received: 10/04/23 08:40

Lab Sample ID: 890-5406-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:49	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/06/23 08:56	10/08/23 05:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/06/23 08:56	10/08/23 05:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/06/23 08:56	10/08/23 05:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:49*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*10/06/23 08:56*	*10/08/23 05:49*	*1*

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Client Sample ID: BH23-51 2'

Lab Sample ID: 890-5406-2
Matrix: Solid
Date Collected: 10/03/23 10:10
Date Received: 10/04/23 08:40

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/08/23 05:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/09/23 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 13:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 13:05	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:05*	*1*
o-Terphenyl	*91*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**129**		5.05		mg/Kg			10/08/23 11:50	1

Client Sample ID: BH23-01 4.5'

Lab Sample ID: 890-5406-3
Matrix: Solid
Date Collected: 10/03/23 11:05
Date Received: 10/04/23 08:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 06:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 06:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 06:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/06/23 08:56	10/08/23 06:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/06/23 08:56	10/08/23 06:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/06/23 08:56	10/08/23 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*10/06/23 08:56*	*10/08/23 06:10*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*10/06/23 08:56*	*10/08/23 06:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/08/23 06:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**110**		50.3		mg/Kg			10/09/23 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		10/05/23 17:18	10/09/23 13:27	1
Diesel Range Organics (Over C10-C28)	**110**		50.3		mg/Kg		10/05/23 17:18	10/09/23 13:27	1

Client Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Client Sample ID: BH23-01 4.5'

Lab Sample ID: 890-5406-3
Matrix: Solid
Date Collected: 10/03/23 11:05
Date Received: 10/04/23 08:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		10/05/23 17:18	10/09/23 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:27*	*1*
o-Terphenyl	*128*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2500**		49.9		mg/Kg			10/07/23 14:20	10

Client Sample ID: BH23-12 5'

Lab Sample ID: 890-5406-4
Matrix: Solid
Date Collected: 10/03/23 12:09
Date Received: 10/04/23 08:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/08/23 06:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/08/23 06:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/08/23 06:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/06/23 08:56	10/08/23 06:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/06/23 08:56	10/08/23 06:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/08/23 06:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*10/06/23 08:56*	*10/08/23 06:30*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*10/06/23 08:56*	*10/08/23 06:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/08/23 06:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			10/09/23 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		10/05/23 17:18	10/09/23 13:49	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		10/05/23 17:18	10/09/23 13:49	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		10/05/23 17:18	10/09/23 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:49*	*1*
o-Terphenyl	*77*		*70 - 130*	*10/05/23 17:18*	*10/09/23 13:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3380**		100		mg/Kg			10/07/23 14:26	20

Surrogate Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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)
880-34081-A-1-A MS	Matrix Spike	93	106
880-34081-A-1-B MSD	Matrix Spike Duplicate	102	110
890-5406-1	BH23-49 2'	88	104
890-5406-2	BH23-51 2'	103	112
890-5406-3	BH23-01 4.5'	99	107
890-5406-4	BH23-12 5'	103	103
LCS 880-64082/1-A	Lab Control Sample	104	102
LCSD 880-64082/2-A	Lab Control Sample Dup	108	102
MB 880-63806/5-A	Method Blank	123	134 S1+
MB 880-64082/5-A	Method Blank	120	148 S1+

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)
890-5406-1	BH23-49 2'	116	126
890-5406-2	BH23-51 2'	88	91
890-5406-3	BH23-01 4.5'	115	128
890-5406-4	BH23-12 5'	71	77
890-5407-A-4-C MS	Matrix Spike	64 S1-	58 S1-
890-5407-A-4-D MSD	Matrix Spike Duplicate	78	69 S1-
LCS 880-64055/2-A	Lab Control Sample	102	106
LCSD 880-64055/3-A	Lab Control Sample Dup	115	119
MB 880-64055/1-A	Method Blank	76	85

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63806/5-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/02/23 16:41	10/07/23 11:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/02/23 16:41	10/07/23 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*10/02/23 16:41*	*10/07/23 11:50*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*10/02/23 16:41*	*10/07/23 11:50*	*1*

Lab Sample ID: MB 880-64082/5-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/06/23 08:56	10/07/23 23:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/06/23 08:56	10/07/23 23:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*10/06/23 08:56*	*10/07/23 23:26*	*1*
1,4-Difluorobenzene (Surr)	*148*	*S1+*	*70 - 130*	*10/06/23 08:56*	*10/07/23 23:26*	*1*

Lab Sample ID: LCS 880-64082/1-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1137		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1092		mg/Kg		109	70 - 130
Toluene	0.100	0.1050		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2305		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1099		mg/Kg		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-64082/2-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1095		mg/Kg		110	70 - 130	4	35

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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

Lab Sample ID: LCSD 880-64082/2-A
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64082

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene			0.100	0.09641		mg/Kg		96	70 - 130	12	35
Toluene			0.100	0.09976		mg/Kg		100	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2241		mg/Kg		112	70 - 130	3	35
o-Xylene			0.100	0.1068		mg/Kg		107	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-34081-A-1-A MS
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.09296		mg/Kg		93	70 - 130
Ethylbenzene	<0.00199	U F1	0.0998	0.06907	F1	mg/Kg		69	70 - 130
Toluene	<0.00199	U	0.0998	0.07741		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1655		mg/Kg		83	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07898		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-34081-A-1-B MSD
Matrix: Solid
Analysis Batch: 64080

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64082

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09153		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.00199	U F1	0.100	0.07093		mg/Kg		71	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.07894		mg/Kg		79	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1677		mg/Kg		84	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.08099		mg/Kg		81	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

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

Lab Sample ID: MB 880-64055/1-A
Matrix: Solid
Analysis Batch: 64187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 09:00	1

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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

Lab Sample ID: MB 880-64055/1-A
Matrix: Solid
Analysis Batch: 64187

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 09:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/05/23 17:18	10/09/23 09:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*10/05/23 17:18*	*10/09/23 09:00*	*1*
o-Terphenyl	*85*		*70 - 130*	*10/05/23 17:18*	*10/09/23 09:00*	*1*

Lab Sample ID: LCS 880-64055/2-A
Matrix: Solid
Analysis Batch: 64187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64055

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1196		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	914.2		mg/Kg		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*106*		*70 - 130*

Lab Sample ID: LCSD 880-64055/3-A
Matrix: Solid
Analysis Batch: 64187

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64055

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1033		mg/Kg		103	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	1004		mg/Kg		100	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*119*		*70 - 130*

Lab Sample ID: 890-5407-A-4-C MS
Matrix: Solid
Analysis Batch: 64187

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	997	768.6		mg/Kg		74	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	997	507.9	F1	mg/Kg		46	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*64*	*S1-*	*70 - 130*
o-Terphenyl	*58*	*S1-*	*70 - 130*

QC Sample Results

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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

Lab Sample ID: 890-5407-A-4-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 64187 — **Prep Batch: 64055**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2	997	946.0	F2	mg/Kg		92	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	997	612.0	F1	mg/Kg		57	70 - 130	19	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*78*		*70 - 130*
o-Terphenyl	*69*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-64009/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 64140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			10/07/23 13:33	1

Lab Sample ID: LCS 880-64009/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 64140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.5		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-64009/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 64140

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

Lab Sample ID: 890-5406-1 MS — **Client Sample ID: BH23-49 2'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 64140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	172	F1	252	394.6	F1	mg/Kg		88	90 - 110

Lab Sample ID: 890-5406-1 MSD — **Client Sample ID: BH23-49 2'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 64140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	172	F1	252	393.6	F1	mg/Kg		88	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

GC VOA

Prep Batch: 63806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-63806/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 64080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	8021B	64082
890-5406-2	BH23-51 2'	Total/NA	Solid	8021B	64082
890-5406-3	BH23-01 4.5'	Total/NA	Solid	8021B	64082
890-5406-4	BH23-12 5'	Total/NA	Solid	8021B	64082
MB 880-63806/5-A	Method Blank	Total/NA	Solid	8021B	63806
MB 880-64082/5-A	Method Blank	Total/NA	Solid	8021B	64082
LCS 880-64082/1-A	Lab Control Sample	Total/NA	Solid	8021B	64082
LCSD 880-64082/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	64082
880-34081-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	64082
880-34081-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	64082

Prep Batch: 64082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	5035	
890-5406-2	BH23-51 2'	Total/NA	Solid	5035	
890-5406-3	BH23-01 4.5'	Total/NA	Solid	5035	
890-5406-4	BH23-12 5'	Total/NA	Solid	5035	
MB 880-64082/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-64082/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-64082/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-34081-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-34081-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	Total BTEX	
890-5406-2	BH23-51 2'	Total/NA	Solid	Total BTEX	
890-5406-3	BH23-01 4.5'	Total/NA	Solid	Total BTEX	
890-5406-4	BH23-12 5'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	8015NM Prep	
890-5406-2	BH23-51 2'	Total/NA	Solid	8015NM Prep	
890-5406-3	BH23-01 4.5'	Total/NA	Solid	8015NM Prep	
890-5406-4	BH23-12 5'	Total/NA	Solid	8015NM Prep	
MB 880-64055/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64055/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-64055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5407-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5407-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	8015B NM	64055

QC Association Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

GC Semi VOA (Continued)

Analysis Batch: 64187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-2	BH23-51 2'	Total/NA	Solid	8015B NM	64055
890-5406-3	BH23-01 4.5'	Total/NA	Solid	8015B NM	64055
890-5406-4	BH23-12 5'	Total/NA	Solid	8015B NM	64055
MB 880-64055/1-A	Method Blank	Total/NA	Solid	8015B NM	64055
LCS 880-64055/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64055
LCSD 880-64055/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64055
890-5407-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	64055
890-5407-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64055

Analysis Batch: 64376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Total/NA	Solid	8015 NM	
890-5406-2	BH23-51 2'	Total/NA	Solid	8015 NM	
890-5406-3	BH23-01 4.5'	Total/NA	Solid	8015 NM	
890-5406-4	BH23-12 5'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 64009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Soluble	Solid	DI Leach	
890-5406-2	BH23-51 2'	Soluble	Solid	DI Leach	
890-5406-3	BH23-01 4.5'	Soluble	Solid	DI Leach	
890-5406-4	BH23-12 5'	Soluble	Solid	DI Leach	
MB 880-64009/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-64009/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-64009/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5406-1 MS	BH23-49 2'	Soluble	Solid	DI Leach	
890-5406-1 MSD	BH23-49 2'	Soluble	Solid	DI Leach	

Analysis Batch: 64140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5406-1	BH23-49 2'	Soluble	Solid	300.0	64009
890-5406-2	BH23-51 2'	Soluble	Solid	300.0	64009
890-5406-3	BH23-01 4.5'	Soluble	Solid	300.0	64009
890-5406-4	BH23-12 5'	Soluble	Solid	300.0	64009
MB 880-64009/1-A	Method Blank	Soluble	Solid	300.0	64009
LCS 880-64009/2-A	Lab Control Sample	Soluble	Solid	300.0	64009
LCSD 880-64009/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	64009
890-5406-1 MS	BH23-49 2'	Soluble	Solid	300.0	64009
890-5406-1 MSD	BH23-49 2'	Soluble	Solid	300.0	64009

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Client Sample ID: BH23-49 2'

Lab Sample ID: 890-5406-1
Matrix: Solid
Date Collected: 10/03/23 10:47
Date Received: 10/04/23 08:40

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	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 05:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64285	10/08/23 05:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			64376	10/09/23 12:43	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	64055	10/05/23 17:18	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 12:43	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	64009	10/05/23 11:16	SMC	EET MID
Soluble	Analysis	300.0		1			64140	10/07/23 13:53	SMC	EET MID

Client Sample ID: BH23-51 2'

Lab Sample ID: 890-5406-2
Matrix: Solid
Date Collected: 10/03/23 10:10
Date Received: 10/04/23 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 05:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64285	10/08/23 05:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			64376	10/09/23 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	64055	10/05/23 17:18	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 13:05	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	64009	10/05/23 11:16	SMC	EET MID
Soluble	Analysis	300.0		1			64140	10/08/23 11:50	SMC	EET MID

Client Sample ID: BH23-01 4.5'

Lab Sample ID: 890-5406-3
Matrix: Solid
Date Collected: 10/03/23 11:05
Date Received: 10/04/23 08:40

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	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 06:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64285	10/08/23 06:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			64376	10/09/23 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64055	10/05/23 17:18	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 13:27	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	64009	10/05/23 11:16	SMC	EET MID
Soluble	Analysis	300.0		10			64140	10/07/23 14:20	SMC	EET MID

Client Sample ID: BH23-12 5'

Lab Sample ID: 890-5406-4
Matrix: Solid
Date Collected: 10/03/23 12:09
Date Received: 10/04/23 08:40

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	64082	10/06/23 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64080	10/08/23 06:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64285	10/08/23 06:30	SM	EET MID

Lab Chronicle

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Client Sample ID: BH23-12 5'
Date Collected: 10/03/23 12:09
Date Received: 10/04/23 08:40

Lab Sample ID: 890-5406-4
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			64376	10/09/23 13:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	64055	10/05/23 17:18	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64187	10/09/23 13:49	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	64009	10/05/23 11:16	SMC	EET MID
Soluble	Analysis	300.0		20			64140	10/07/23 14:26	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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	T104704400-23-26	06-30-24

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: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

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	EPA	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

EPA = US Environmental Protection Agency

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: Vertex
Project/Site: MOBLEY WATER RECYCLING

Job ID: 890-5406-1
SDG: 23 04 909

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5406-1	BH23-49 2'	Solid	10/03/23 10:47	10/04/23 08:40
890-5406-2	BH23-51 2'	Solid	10/03/23 10:10	10/04/23 08:40
890-5406-3	BH23-01 4.5'	Solid	10/03/23 11:05	10/04/23 08:40
890-5406-4	BH23-12 5'	Solid	10/03/23 12:09	10/04/23 08:40

Released to Imaging: 3/12/2025 9:46:11 AM
Received by OCD: 7/31/2024 4:04:52 PM

eurofins | Environment Testing Xenco

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: _____

www.xenco.com Page 1 of 1

Project Manager:	Chance Dixon	Bill to: (if different)	Solaris Rob Kirk
Company Name:	Vertex	Company Name:	Solaris
Address:	/ on file	Address:	
City, State ZIP:		City, State ZIP:	
Phone:		Email:	CDixon@vertex.ca

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:	Mobley Water Recycling	Turn Around	☑ Routine ☐ Rush
Project Number:	23-04909	Due Date:	10.20.23
Project Location:	Mobley	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Brennan Costafile		
PO #:			

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:	5.6
Total Containers:		Corrected Temperature:	5.4

ANALYSIS REQUEST

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTEX	TPH 1015	Cl
BH23-49	2'	Soil	10.03.23	10:47	2'		1		✓	✓	✓
BH23-51	2'			10:10	2'		2				
BH23-01	4.5'			11:05	4.5'						
BH23-12	5'	↓	↓	12:09	5'		↓		↓	↓	↓

890-5406 Chain of Custody

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 Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Brennan Costafile	Sams	10/4 840	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

plase cc dcostafile@vertex.ca

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5406-1
SDG Number: 23 04 909

Login Number: 5406
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Vertex

Job Number: 890-5406-1
SDG Number: 23 04 909

Login Number: 5406
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 10/05/23 10:51 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	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 367192

QUESTIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2323237413**
Incident Name	**NAPP2323237413 MOBLEY WATER RECYCLING FACILITY 2 @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Facility	**[fVV2131951088] MOBLEY CONTAINMENTS #1 AND #2**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	MOBLEY WATER RECYCLING FACILITY 2
Date Release Discovered	08/19/2023
Surface Owner	Private

Incident Details	
Please answer all 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
Did this release result in any injuries	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 | Pipeline (Any) | Produced Water | Released: 80 BBL | Recovered: 20 BBL | Lost: 60 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
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.*

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

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 Paragraph (4) of Subsection B of 19.15.29.8 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 Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Julian Romero Title: Environmental Advisor Email: julian.romero@ariswater.com Date: 07/31/2024

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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

QUESTIONS (continued)

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 100 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 100 (ft.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	26600
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	58
GRO+DRO (EPA SW-846 Method 8015M)	58
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	10/28/2024
On what date will (or did) the final sampling or liner inspection occur	11/28/2024
On what date will (or was) the remediation complete(d)	11/28/2024
What is the estimated surface area (in square feet) that will be reclaimed	20000
What is the estimated volume (in cubic yards) that will be reclaimed	2000
What is the estimated surface area (in square feet) that will be remediated	20000
What is the estimated volume (in cubic yards) that will be remediated	2000
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
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.	
I hereby agree and sign off to the above statement	Name: Julian Romero Title: Environmental Advisor Email: julian.romero@ariswater.com Date: 07/31/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator:	OGRID:
SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	***{Unavailable.}***

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 367192

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 367192
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Please review "Incident Events" on the OCD Permitting Incident page for conditions of approval.	3/12/2025