

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

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

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

Incident ID	NCS1907233330
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Harvest Four Corners, LLC	OGRID 37388
Contact Name Monica Smith	Contact Telephone 505-632-4625
Contact email msmith@harvestmidstream.com	Incident # (assigned by OCD) NCS1907233330
Contact mailing address 1755 Arroyo Dr., Farmington, NM 87413	

### Location of Release Source

Latitude 36.430000 Longitude -107.476944  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name Lateral H-21	Site Type Pipeline
Date Release Discovered 3/12/2019	API# (if applicable)

Unit Letter	Section	Township	Range	County
F	4	25N	6W	Rio Arriba

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown at this time	Volume Recovered (bbls) Currently being recovered
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) Unknown at this time	Volume Recovered (bbls) Currently being recovered
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) 658	Volume Recovered (Mcf) 0
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release

A line leak was discovered on the Lateral H-21 pipeline.

Upon discovery, the release was immediately stopped. Historic liquids release was discovered during excavation along with ground water impacts (ground water is at 4ft). Harvest is currently digging and hauling impacted soil. Harvest is collecting impacted ground water and removing for disposal.

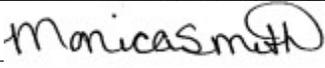
State of New Mexico  
Oil Conservation Division

Incident ID	NCS1907233330
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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  Natural Gas release over 500mcf and impacts to ground water
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notification was made by Monica Smith (Harvest) to Cory Smith, Vanessa Fields, and Jim Griswold of the OCD by email on 3/13/2019 @ 8:42am.	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:  _____ _____ _____
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Monica Smith</u> Title: <u>Environmental Specialist</u> Signature: <u></u> Date: <u>3/22/2023</u> email: <u>msmith@harvestmidstream.com</u> Telephone: <u>505-632-4625</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____

Incident ID	NCS1907233330
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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&lt;50</u> (ft bgs)
Did this release impact groundwater or surface water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

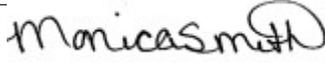
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico  
Oil Conservation Division

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

Printed Name: Monica Smith Title: Environmental Specialist  
 Signature:  Date: 3/22/2023  
 email: msmith@harvestmidstream.com Telephone: 505-632-4625

**OCD Only**

Received by: Jocelyn Harimon Date: 03/22/2023

Incident ID	NCS1907233330
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## Remediation Plan

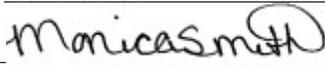
**Remediation Plan Checklist:** Each of the following items must be included in the plan.

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

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

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

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

Printed Name: Monica Smith Title: Environmental Specialist  
 Signature:  Date: 3/22/2023  
 email: msmith@harvestmidstream.com Telephone: 505-632-4625

**OCD Only**

Received by: Jocelyn Harimon Date: 03/22/2023

- Approved       Approved with Attached Conditions of Approval       Denied       Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Incident ID	NCS1907233330
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## Closure

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

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

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

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

Printed Name: Monica Smith Title: Environmental Specialist  
 Signature:  Date: 3/22/2023  
 email: msmith@harvestmidstream.com Telephone: 505-632-4625

**OCD Only**

Received by: Jocelyn Harimon Date: 03/22/2023

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

Closure Approved by:  Date: 05/15/2023  
 Printed Name: Nelson Velez Title: Environmental Specialist - Adv



March 16, 2023

**New Mexico Oil Conservation Division**

New Mexico Energy, Minerals, and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: 2022 Annual Groundwater Report – Closure Request**

Lateral H-21 Pipeline Release  
Rio Arriba County, New Mexico  
Harvest Four Corners, LLC  
NMOCD Incident Number: NCS1907233330

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Harvest Four Corners, LLC (Harvest), presents this detailed report for activities conducted at the Lateral H-21 Pipeline Release (Site), Incident Number NCS1907233330, between January 2022 and January 2023. The scope of work for this project includes annual monitoring of petroleum hydrocarbon impacts to groundwater resulting from a pipeline release in March 2019. Based on conclusions of this report, Harvest is requesting no further action for Incident Number NCS1907233330.

**LOCATION**

The Site is located approximately 300 feet east of Largo Canyon Wash in Dogie Canyon between Julian Canyon and Forbes Canyon at Latitude 36.42788 and Longitude -107.4757 in Unit F, Section 4, Township 25 North, Range 6 West, in Rio Arriba County (Figure 1). The Site is an active pipeline that transports natural gas to the Dogie Compressor Station, located approximately 1,750 feet northwest of the Site.

**HISTORY**

On March 12, 2019, an unknown volume of produced water and natural gas condensate and approximately 658 thousand cubic feet (MCF) of natural gas were released from the Site due to corrosion on the pipeline. Upon discovery, the release was immediately contained, and the pipeline was shut in. An initial C-141 was submitted to the New Mexico Oil Conservation Division (NMOCD) on March 13, 2019, and assigned incident number NCS1907233330.

Harvest excavated approximately 3,200 cubic yards of impacted soil and subsequently disposed of the soil at the Envirotech Landfarm in Bloomfield, New Mexico. The excavation extent is illustrated on Figure 2. An NMOCD representative witnessed collection of eight confirmation soil samples from the excavation sidewalls on March 29 and April 5, 2019. Laboratory analytical results indicated the concentrations of benzene, toluene, ethylbenzene, and total xylenes (BTEX), total petroleum hydrocarbons (TPH), and chloride in soil on the sidewalls of the excavation were below the NMOCD Table I Closure Criteria. Soil analytical results were previously submitted in the *Revised Stage 1 Abatement Plan* submitted by WSP USA Inc. (WSP) in June 2021.

While excavating, groundwater was encountered at approximately 4 feet below ground surface (bgs). After impacted soil was removed, Harvest backfilled a portion of the excavation with clean fill and left a portion of the excavation open to allow access to the groundwater.

Between April and June 2019, Harvest pumped approximately 3,800 barrels of fluid from the excavation and disposed of it at Agua Moss in Bloomfield, New Mexico. WSP was retained by Harvest to collect grab samples of the water in the portion of the excavation that remained open. Five water samples were collected from the open excavation between April 3 and June 6, 2019, to evaluate the quality of groundwater. All five groundwater samples exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard for benzene.

In July 2019, temporary monitoring wells TMW01 through TMW08 were installed to delineate impacts to groundwater. Boreholes were advanced using a hand auger ranging from 5 feet to 8 feet bgs. Once saturated soils were encountered, the boreholes were advanced an additional 2.5 feet into the saturated zone to allow temporary monitoring wells to be installed within the groundwater aquifer. Prepacked temporary groundwater monitoring wells were installed in each borehole with screened casing across the groundwater interface and solid casing to the surface. Wells were constructed out of 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing and prepacked 2-inch Schedule 40 PVC 0.010-inch slotted screen wrapped with 65-mesh stainless steel screen and prepacked with 20/40 silica sand. Annulus volume between the prepacked well screen and the borehole were filled with clean, native fill material. The monitoring wells were completed with flush-mount well vaults with steel protective plates and were cemented into the ground. Temporary monitoring well TMW05 was found to be destroyed in August 2020.

In April 2021, temporary monitoring wells TMW09 and TMW10 were installed in the same manner described above to further delineate impacted groundwater observed in TMW03. Temporary groundwater monitoring well locations are depicted on Figures 2 through 6.

The NMOCD reviewed and approved the *Revised Stage 1 Abatement Plan* on January 3, 2022. In May 2022, Ensolum, on behalf of Harvest, conducted the groundwater monitoring at the Site for the remainder of 2022 and into 2023.

## GROUNDWATER MONITORING ACTIVITIES

In 2022 and 2023, WSP and Ensolum conducted quarterly groundwater monitoring activities at the Site in January, May, August, and November of 2022, and January of 2023. These activities included measuring depth to groundwater and collecting groundwater samples from nine monitoring wells (TMW01, TMW02, TMW03, TMW04, TMW06, TMW07, TMW08, TMW09, and TMW10).

Groundwater elevation monitoring included recording depth to groundwater measurements in all existing wells with an oil/water interface probe. The interface probe was decontaminated with Alconox™ soap and rinsed with distilled water prior to each measurement. Ensolum used existing top-of-casing well elevations to draft groundwater contours and determine groundwater flow direction. Contours were inferred based on groundwater elevations and physical characteristics at the Site (topography, proximity to irrigation ditches, etc.). This data is summarized in Table 1 and depicted on Figures 2 through 6.

Prior to sampling groundwater, depth to groundwater and total depth of the monitoring wells were measured with an oil/water interface probe. The volume of groundwater was calculated, and a minimum of three well casing volumes of groundwater was purged using a disposable polyethylene bailer or a peristaltic pump and new tubing per each event. As groundwater was removed from the monitoring wells, pH, electric conductivity (EC), and temperature were

monitored. Purge water was containerized and disposed of at a nearby compressor station. Significant precipitation and sediment runoff buried many of the monitoring wells prior to the August 2022 groundwater monitoring event. Ensolum visited the Site on August 25, 2022, to excavate any buried monitoring wells and purge out any sediment and liquids accumulated in the monitoring wells. Ensolum returned on August 26, 2022, to collect grab groundwater samples of all nine monitoring wells without collecting groundwater parameters due to low recharge volumes from the previous purging event. Copies of the groundwater sample collection forms are presented in Appendix A.

Once the monitoring wells were purged, groundwater samples were collected by filling three 40-milliliter (mL) glass vials. The laboratory-supplied vials were filled and capped with no headspace to prevent degradation of the sample. Samples were labeled and immediately sealed and packed on ice. The samples were transferred to Hall Environmental Analysis Lab (Hall) for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021.

## GROUNDWATER RESULTS

Depth to groundwater data collected during the January, May, August, and November 2022, and January 2023 monitoring events is summarized in Table 1. Groundwater flow direction was generally to the north (Figure 2 through Figure 6). No measurable phase-separated hydrocarbons were detected in any monitoring wells during the quarterly 2022 or 2023 monitoring events.

Groundwater analytical results from all quarterly 2022 and 2023 events indicate BTEX concentrations were in compliance with applicable NMWQCC standards. Table 2 summarizes groundwater analytical results, and the complete laboratory analytical reports are included in Appendix B.

## CONCLUSION

The soil excavation extent around the release point and total volume of liquids recovered from the open excavation appear to have remediated gross impacts to soil and groundwater. The sidewall soil samples are all in compliance with the NMOCD Table I Closure Criteria. Soil analytical results were previously submitted in the *Revised Stage 1 Abatement Plan* submitted in June 2021, and approved by the NMOCD in January 2022. Following installation of temporary monitoring wells in July 2019 and April 2021, there has been continued decreasing dissolved-phase benzene concentrations. The last exceedances were observed in August 2020 in monitoring wells TMW02 and TMW03, with benzene concentrations of 8.5 micrograms per liter ( $\mu\text{g/L}$ ) and 16  $\mu\text{g/L}$ , respectively. Beginning with the April 2021 groundwater monitoring event, there have been no BTEX concentrations that exceed applicable standards.

## REQUEST FOR CLOSURE

Based on quarterly groundwater monitoring analytical results since April 2021, there have been eight consecutive quarters of groundwater monitoring events that are in compliance with BTEX concentrations in accordance with NMWQCC standards. As there are no longer any concentrations of contaminants of concern that pose an imminent threat to human health, to the environment, groundwater, and/or surface water, Harvest respectfully requests closure on the Lateral H-21 Pipeline Release, Incident Number NCS1907233330. Upon approval of the closure request from the NMOCD, the temporary monitoring wells will be removed and backfilled with hydrated bentonite chips. A photographic log is included as Appendix C.

Ensolum appreciates the opportunity to provide this report to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely,

**ENSOLUM, LLC**



Danny Burns  
Senior Geologist  
(303) 601-1420  
dburns@ensolum.com



Brooke Herb  
Senior Geologist  
(970) 403-6824  
bherb@ensolum.com

**Attachments:**

- Figure 1: Site Location Map
- Figure 2: Groundwater Elevation and Analytical Results (January 2022)
- Figure 3: Groundwater Elevation and Analytical Results (May 2022)
- Figure 4: Groundwater Elevation and Analytical Results (August 2022)
- Figure 5: Groundwater Elevation and Analytical Results (November 2022)
- Figure 6: Groundwater Elevation and Analytical Results (January 2023)

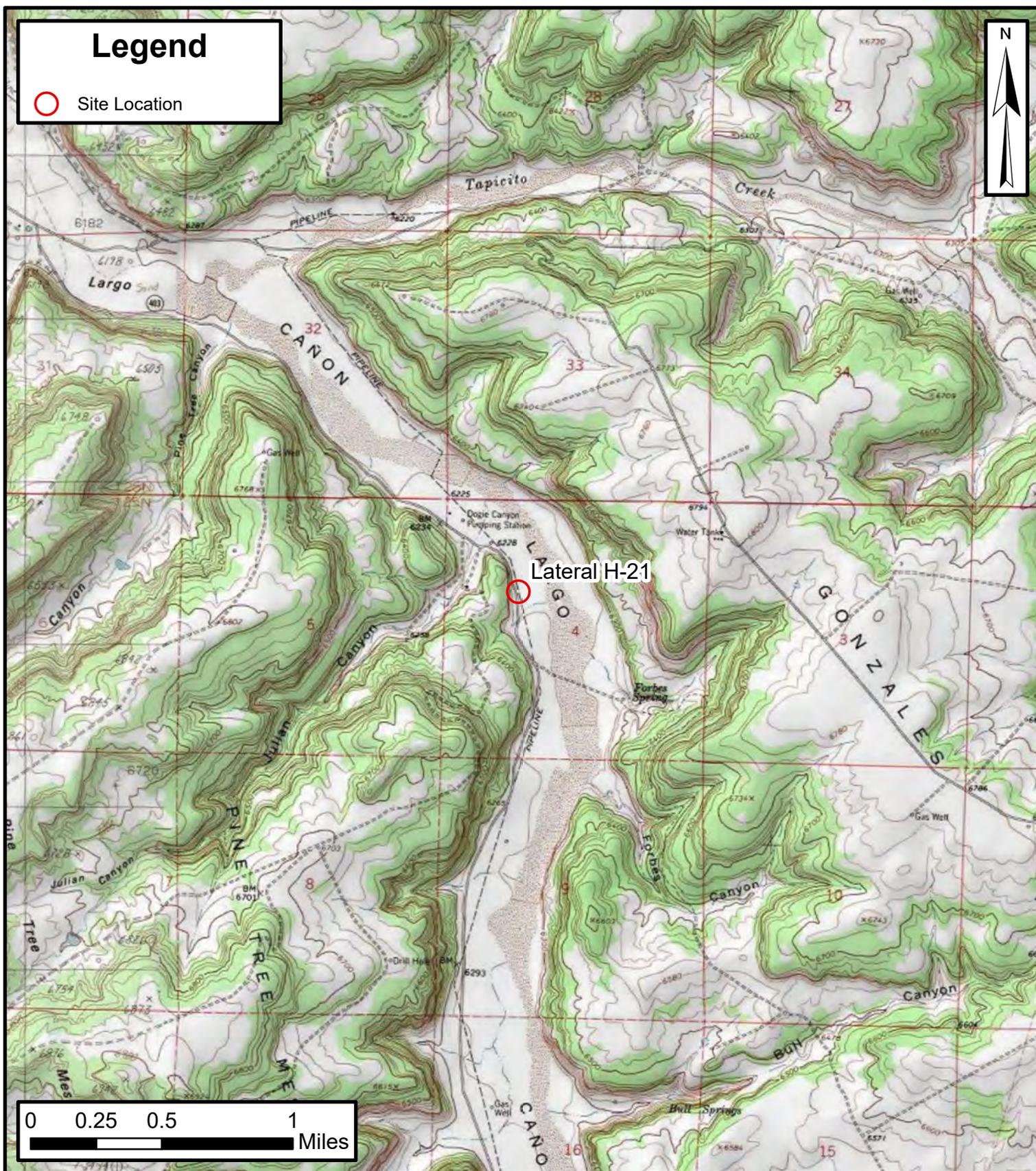
- Table 1: Groundwater Elevations
- Table 2: Groundwater Analytical Results

- Appendix A: Sample Collection Forms
- Appendix B: Laboratory Analytical Reports
- Appendix C: Photographic Log



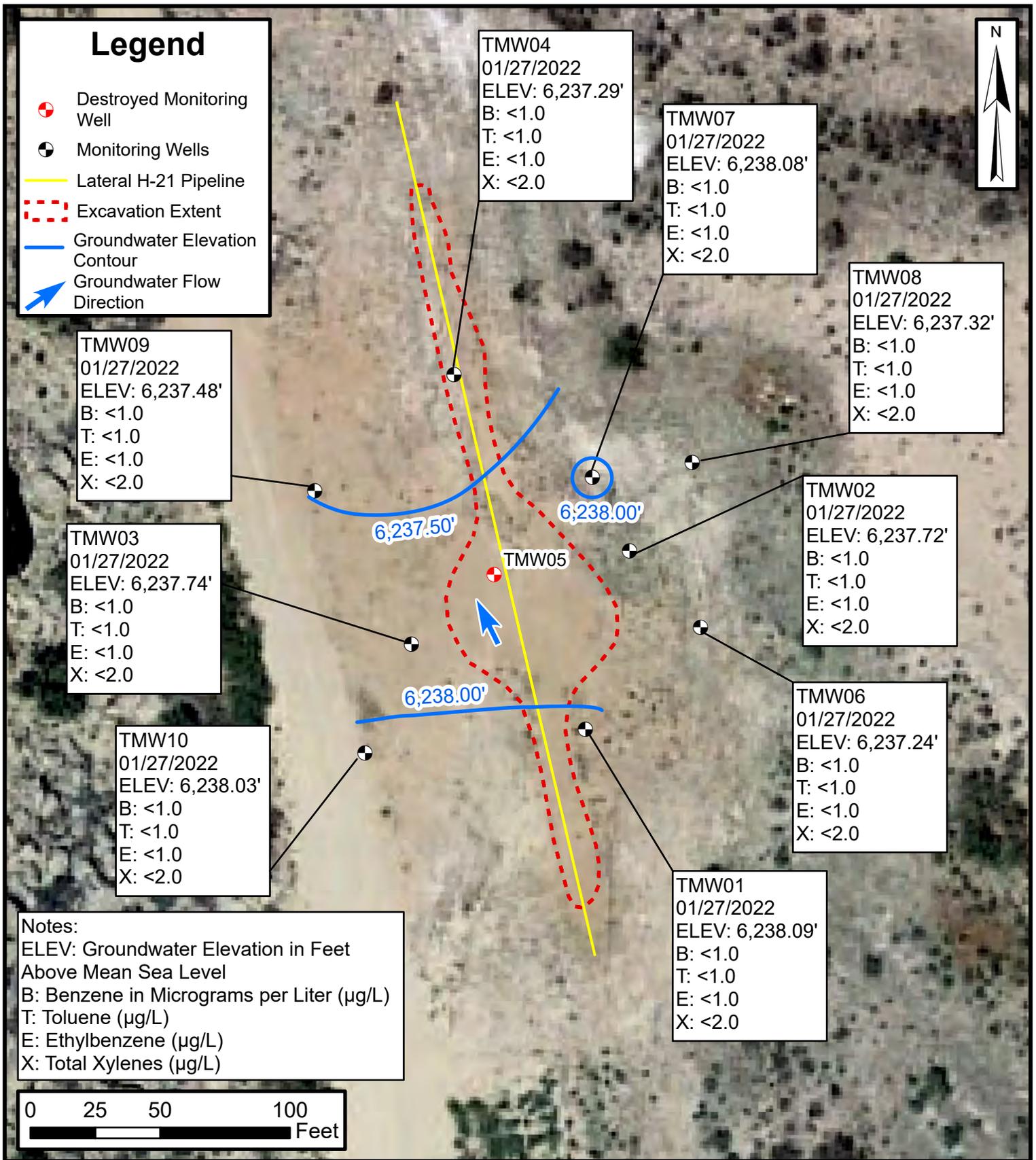
## FIGURES





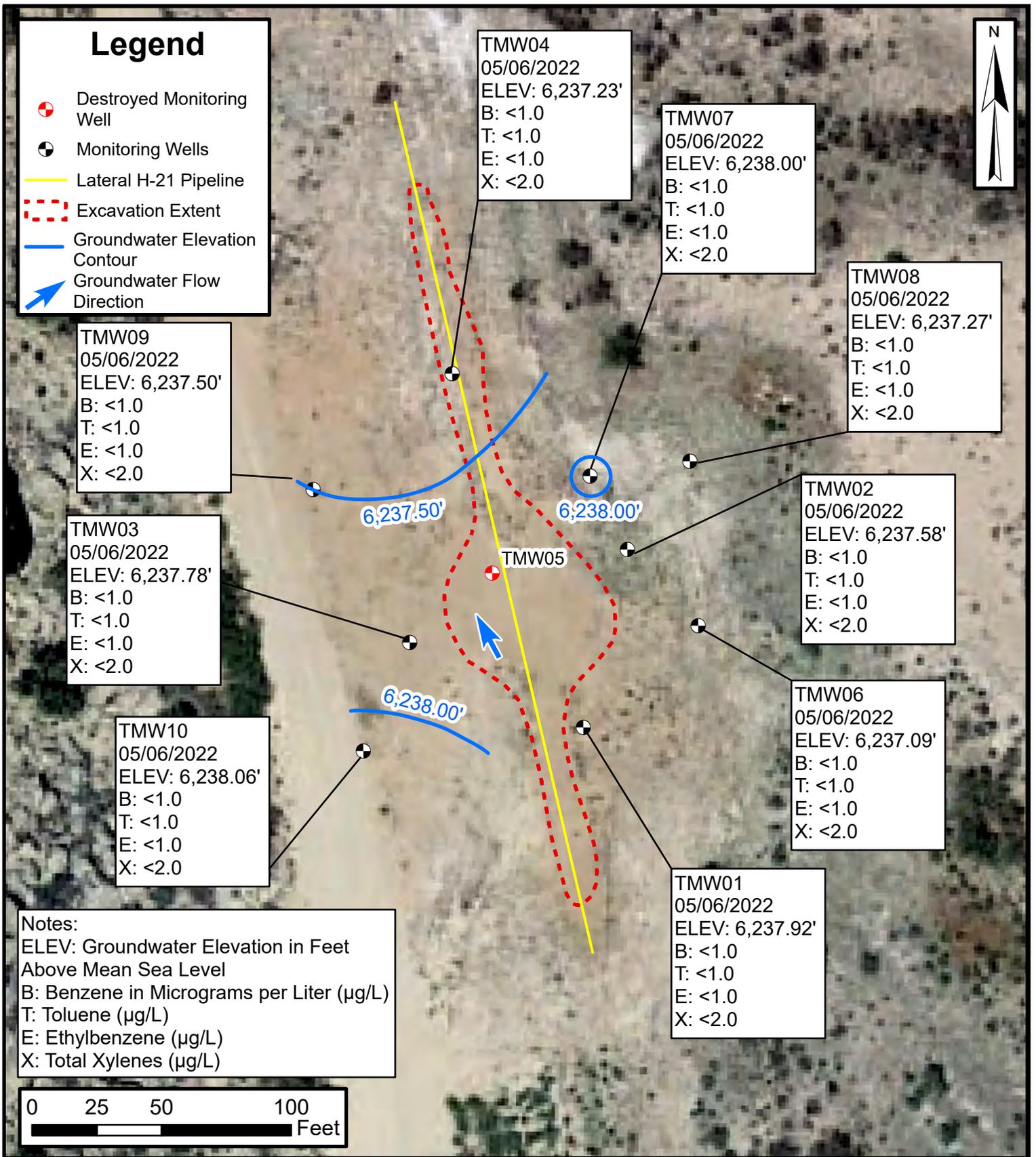
**Site Location**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE**  
**1**



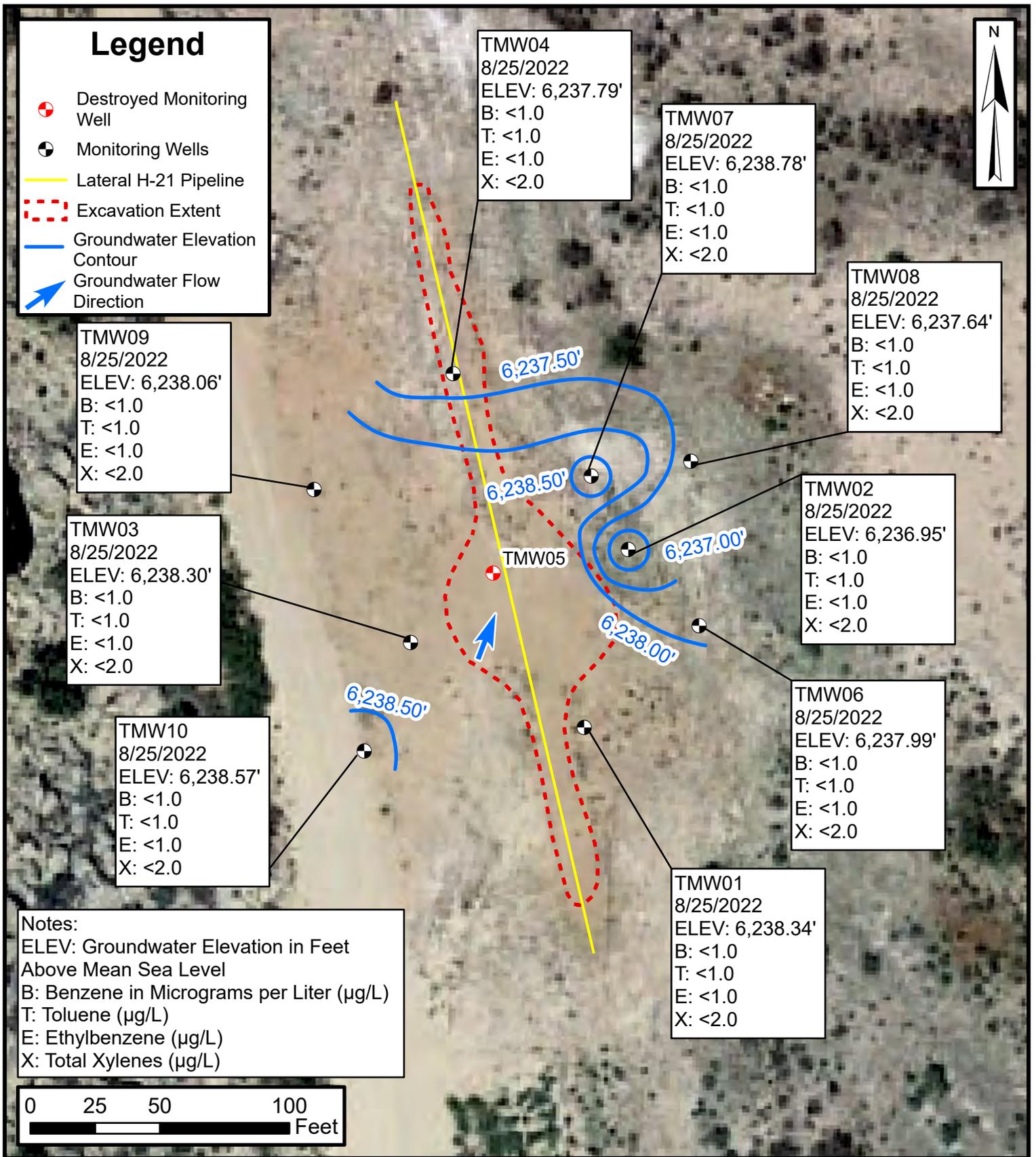
**Groundwater Elevation and Analytical Results (January 2022)**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE 2**



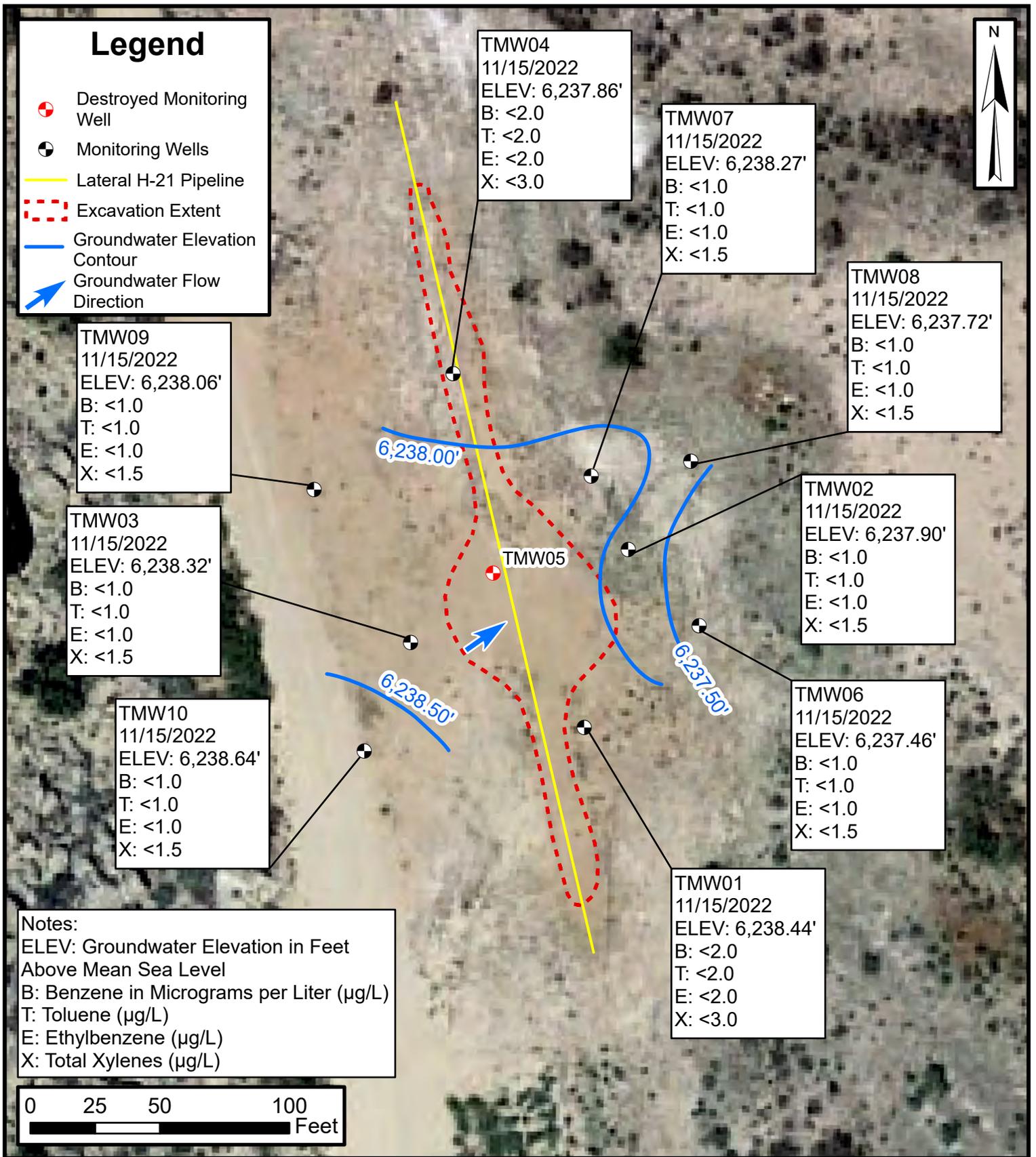
**Groundwater Elevation and Analytical Results (May 2022)**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE 3**



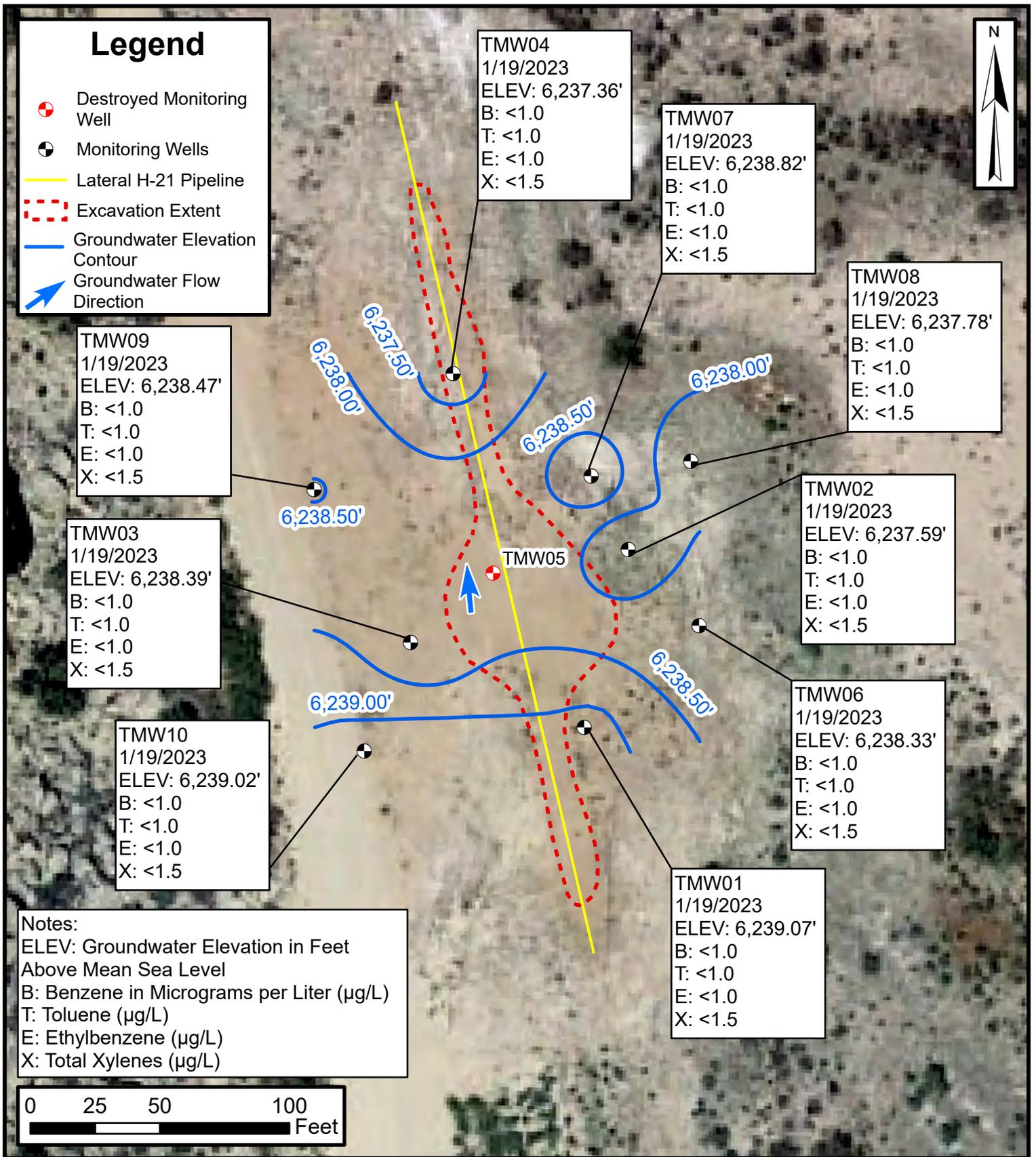
**Groundwater Elevation and Analytical Results (August 2022)**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE 4**



**Groundwater Elevation and Analytical Results (November 2022)**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE 5**



**Groundwater Elevation and Analytical Results (January 2023)**  
 Lateral H-21  
 Harvest Four Corners, LLC  
 NESW Sec 04, T25N, R6W  
 36.42788° N, 107.4757° W  
 Rio Arriba County, New Mexico

**FIGURE 6**



TABLES



**TABLE 1**  
**GROUNDWATER ELEVATIONS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet amsl)
TMW01	6,242.12	5.33	7/17/2019	4.11	6,238.01
			7/23/2019	4.12	6,238.00
			7/25/2019	4.10	6,238.02
			8/7/2020	4.23	6,237.89
			4/29/2021	4.26	6,237.86
			9/23/2021	4.56	6,237.56
			11/23/2021	4.27	6,237.85
			1/27/2022	4.04	6,238.08
			5/6/2022	4.20	6,237.92
			8/25/2022	3.78	6,238.34
			11/15/2022	3.68	6,238.44
1/19/2023	3.05	6,239.07			
TMW02	6,241.00	5.32	7/17/2019	3.25	6,237.75
			7/23/2019	3.26	6,237.74
			7/25/2019	3.25	6,237.75
			8/7/2020	3.22	6,237.78
			4/29/2021	3.46	6,237.54
			9/23/2021	3.86	6,237.14
			11/23/2021	3.57	6,237.43
			1/27/2022	3.28	6,237.72
			5/6/2022	3.42	6,237.58
			8/25/2022	4.05	6,236.95
			11/15/2022	3.10	6,237.90
1/19/2023	3.41	6,237.59			
TMW03	6,242.60	6.22	7/17/2019	4.77	6,237.83
			7/23/2019	5.66	6,236.94
			7/25/2019	4.83	6,237.77
			8/7/2020	5.96	6,236.64
			4/29/2021	5.09	6,237.51
			9/23/2021	5.02	6,237.58
			11/23/2021	5.09	6,237.51
			1/27/2022	4.86	6,237.74
			5/6/2022	4.82	6,237.78
			8/25/2022	4.30	6,238.30
			11/15/2022	4.28	6,238.32
1/19/2023	4.21	6,238.39			



**TABLE 1**  
**GROUNDWATER ELEVATIONS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet amsl)
TMW04	6,241.57	5.95	7/17/2019	4.20	6,237.37
			7/23/2019	5.60	6,235.97
			7/25/2019	4.28	6,237.29
			8/7/2020	4.50	6,237.07
			4/29/2021	4.52	6,237.05
			9/23/2021	4.70	6,236.87
			11/23/2021	3.76	6,237.81
			1/27/2022	4.28	6,237.29
			5/6/2022	4.34	6,237.23
			8/25/2022	3.78	6,237.79
			11/15/2022	3.71	6,237.86
1/19/2023	4.21	6,237.36			
TMW05	6,241.74	--	7/17/2019	4.01	6,237.73
			7/23/2019	4.02	6,237.72
			7/25/2019	4.02	6,237.72
			8/7/2020	Destroyed	Destroyed
TMW06	6,240.61	5.54	7/23/2019	3.54	6,237.07
			7/25/2019	3.43	6,237.18
			8/7/2020	3.64	6,236.97
			4/29/2021	3.64	6,236.97
			9/23/2021	4.02	6,236.59
			11/23/2021	3.62	6,236.99
			1/27/2022	3.37	6,237.24
			5/6/2022	3.52	6,237.09
			8/25/2022	2.62	6,237.99
			11/15/2022	3.15	6,237.46
1/19/2023	2.28	6,238.33			
TMW07	6,241.42	5.49	7/23/2019	3.55	6,237.87
			7/25/2019	3.45	6,237.97
			8/7/2020	3.70	6,237.72
			4/29/2021	3.69	6,237.73
			9/23/2021	3.83	6,237.59
			11/23/2021	3.61	6,237.81
			1/27/2022	3.34	6,238.08
			5/6/2022	3.42	6,238.00
8/25/2022	2.64	6,238.78			



**TABLE 1**  
**GROUNDWATER ELEVATIONS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Top of Casing Elevation (feet amsl)	Total Depth (feet)	Date	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet amsl)
TMW07	6,241.42	5.49	11/15/2022	3.15	6,238.27
			1/19/2023	2.60	6,238.82
TMW08	6,240.90	5.97	7/25/2019	3.25	6,237.65
			8/7/2020	3.52	6,237.38
			4/29/2021	3.39	6,237.51
			9/23/2021	3.29	6,237.61
			11/23/2021	3.47	6,237.43
			1/27/2022	3.58	6,237.32
			5/6/2022	3.63	6,237.27
			8/25/2022	3.26	6,237.64
			11/15/2022	3.18	6,237.72
1/19/2023	3.12	6,237.78			
TMW09	6,243.66	8.09	4/29/2021	6.42	6,237.24
			9/23/2021	6.63	6,237.03
			11/23/2021	6.41	6,237.25
			1/27/2022	6.18	6,237.48
			5/6/2022	6.16	6,237.50
			8/25/2022	5.60	6,238.06
			11/15/2022	5.60	6,238.06
1/19/2023	5.19	6,238.47			
TMW10	6,243.94	8.31	4/29/2021	6.20	6,237.74
			9/23/2021	6.40	6,237.54
			11/23/2021	6.18	6,237.76
			1/27/2022	5.91	6,238.03
			5/6/2022	5.88	6,238.06
			8/25/2022	5.37	6,238.57
			11/15/2022	5.30	6,238.64
1/19/2023	4.92	6,239.02			

**Notes:**

amsl: above mean sea level

BTOC: below top of casing

--: not measured



**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>NMWQCC Standards</b>		<b>5</b>	<b>1,000</b>	<b>700</b>	<b>620</b>
Open Excavation Grab Samples	4/3/2019	<b>310</b>	330	8.3	41
	4/10/2019	<b>140</b>	89	2.7	20
	4/22/2019	<b>31</b>	36	<2.0	5.5
	5/9/2019	<b>220</b>	160	3.8	24
	6/3/2019	<b>39</b>	5.4	<1.0	<1.5
TMW01	7/17/2019	<1.0	<1.0	<1.0	<2.0
	8/7/2020	3.3	<1.0	6.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<2.0	<2.0	<2.0	<3.0
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<2.0	<2.0	<2.0	<3.0
1/19/2023	<1.0	<1.0	<1.0	<1.5	
TMW02	7/17/2019	<b>49</b>	<1.0	<1.0	<2.0
	8/7/2020	<b>8.5</b>	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
	9/23/2021	2.8	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
1/19/2023	<1.0	<1.0	<1.0	<1.5	
TMW03	7/17/2019	<1.0	<1.0	<1.0	<2.0
	8/7/2020	<b>16</b>	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
	9/23/2021	1.4	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
1/19/2023	<1.0	<1.0	<1.0	<1.5	
TMW04	7/17/2019	<1.0	<1.0	<1.0	<2.0



**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>NMWQCC Standards</b>		<b>5</b>	<b>1,000</b>	<b>700</b>	<b>620</b>
TMW04	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<2.0	<2.0	<2.0	<3.0
	1/19/2023	<1.0	<1.0	<1.0	<1.5
TMW05	7/17/2019	<1.0	<1.0	<1.0	<2.0
	8/7/2020	Destroyed	Destroyed	Destroyed	Destroyed
TMW06	7/23/2019	<1.0	<1.0	<1.0	<1.5
	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<2.0	<2.0	<2.0	<3.0
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
1/19/2023	<1.0	<1.0	<1.0	<1.5	
TMW07	7/23/2019	<1.0	<1.0	<1.0	<1.5
	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<2.0	<2.0	<2.0	<3.0
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
1/19/2023	<1.0	<1.0	<1.0	<1.5	
TMW08	7/25/2019	2.2	<2.0	<2.0	<4.0
	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<2.0	<2.0	<2.0	<3.0
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0



**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS**  
 Harvest Four Corners, LLC - Lateral H-21 Pipeline Release  
 Rio Arriba County, New Mexico  
 Ensolum Project No. 07B2002005

Well Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
<b>NMWQCC Standards</b>		<b>5</b>	<b>1,000</b>	<b>700</b>	<b>620</b>
TMW08	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
	1/19/2023	<1.0	<1.0	<1.0	<1.5
TMW09	4/29/2021	<2.0	<2.0	<2.0	<3.0
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
	1/19/2023	<1.0	<1.0	<1.0	<1.5
TMW10	4/29/2021	<1.0	<1.0	<1.0	<1.5
	9/23/2021	<1.0	<1.0	<1.0	<2.0
	11/23/2021	<1.0	<1.0	<1.0	<1.5
	1/27/2022	<1.0	<1.0	<1.0	<2.0
	5/6/2022	<1.0	<1.0	<1.0	<2.0
	8/26/2022	<1.0	<1.0	<1.0	<2.0
	11/15/2022	<1.0	<1.0	<1.0	<1.5
	1/19/2023	<1.0	<1.0	<1.0	<1.5

**Notes:**

µg/L: milligrams per liter

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

ND: not detected, practical quantitation limit unknown

NMWQCC: New Mexico Water Quality Control Commission

--: not analyzed

<0.037: indicates result less than the stated laboratory reporting limit (RL)

Concentrations in **bold** and shaded exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code



## APPENDIX A

# Sample Collection Forms

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WSP USA Inc.  
848 E. 2nd Ave.  
Durango, Colorado 81301  
T 970.385.1096

**Groundwater Sample Collection Form**

Project Name: Quarterly Groundwater Monitoring  
Project Number: \_\_\_\_\_

Project Location: Lateral H-21  
Sampler: RH

Sample ID: TMW-09  
Sample Date: 1/27/22  
Laboratory: Hall Environmental  
Analyses: BTEX 8021

Matrix: Groundwater  
Sample Time: 1257  
Shipping Method: Hand Delivery

Depth to Water: 6.18  
Time: \_\_\_\_\_

Total Depth of Well: 8.09  
Depth to Product: \_\_\_\_\_

Vol. of Water to Purge: low flow (height of water column \* 0.1631 for 2" well or 0.6524 for 4" well) \* 3 well vols  
Method of Purging: Peristaltic pump  
Method of Sampling: ↓

Time	Vol. Removed	Total Vol. Removed (gallons)	pH (std. units)	Temp. (°F) C	Conductivity (us or ms)	Comments
1242	0.125	0.125	6.79	13.4	7.57	sit Murky
1244	0.125	0.25	6.58	13.3	7.53	SAA
1245	0.125	0.375	6.52	13.3	7.55	SAA
1246	0.125	0.50	6.48	13.2	7.56	SAA
1247	0.125	0.625	6.44	13.2	7.56	SAA
1248	0.125	0.75	6.39	13.1	7.58	SAA
1249	0.125	0.875	6.33	13.1	7.59	SAA
1250	0.125	1.0	6.24	13.0	7.60	SAA
1251	0.125	1.125	6.18	12.9	7.61	SAA Clear
1252	0.125	1.25	6.18	12.9	7.61	Clear
1253	0.125	1.375	6.12	12.9	7.62	SAA
1254	0.125	1.5	6.11	12.9	7.61	SAA

Comments: \_\_\_\_\_  
\_\_\_\_\_

Describe Deviations from SOP: \_\_\_\_\_  
\_\_\_\_\_

Signature: [Signature] Date: 1/27/22











Client: Harvest  
 Project Name: Lot H-21  
 Project Location: \_\_\_\_\_  
 Project Manager: B. Herb

LOW-FLOW GROUNDWATER SAMPLING FORM

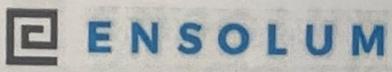
SAMPLING INFORMATION

Date Completed: 5-6-22  
 Total Depth of Monitor Well: 5.52  
 Screen Interval: \_\_\_\_\_  
 Sample Tubing Intake Depth: \_\_\_\_\_  
 Geologist: \_\_\_\_\_

Soil Boring / Monitor Well Number: TMW06  
 Project #: \_\_\_\_\_  
 Type of Water Quality Meter: Aqua6roll  
 Date Calibrated: 5-6-22  
 Other Notes: \_\_\_\_\_

Monitor Well Depth	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments:
				(minutes)	(L/min)	(°C)	(unitless)	(mg/L)	(mV)	(mS/cm)	(feet)	
		<u>3.52</u>		<u>1</u>	<u>0.1</u>	<u>12.6</u>	<u>7.80</u>	<u>NR</u>	<u>NR</u>	<u>0.56</u>	<u>NR</u>	<u>Turbid, dark brown</u>
				<u>2</u>	<u>0.1</u>	<u>12.4</u>	<u>7.80</u>	<u>↓</u>	<u>↓</u>	<u>0.42</u>	<u>↓</u>	
				<u>3</u>	<u>0.1</u>	<u>12.4</u>	<u>7.79</u>	<u>↓</u>	<u>↓</u>	<u>0.46</u>	<u>↓</u>	
				<u>4</u>	<u>0.1</u>	<u>12.3</u>	<u>7.79</u>	<u>↓</u>	<u>↓</u>	<u>0.47</u>	<u>↓</u>	
				<u>5</u>	<u>0.1</u>	<u>12.3</u>	<u>7.76</u>	<u>↓</u>	<u>↓</u>	<u>0.49</u>	<u>↓</u>	

NR = Not Recorded





Client: Harvest  
 Project Name: LAB. H-21  
 Project Location: \_\_\_\_\_  
 Project Manager: B. Herb

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Soil Boring / Monitor Well Number: TMW08  
 Project #: \_\_\_\_\_  
 Date Completed: 5-6-22 Type of Water Quality Meter: AquaTroll  
 Total Depth of Monitor Well: 5.94 Date Calibrated: 5-6-22  
 Screen Interval: \_\_\_\_\_ Other Notes: \_\_\_\_\_  
 Sample Tubing Intake Depth: \_\_\_\_\_  
 Geologist: E. Carmil

Monitor Well Depth	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments:
				(minutes)	(L/min)	(°C)	(unitless)	(mg/L)	(mV)	(mS/cm)	(feet)	
		<u>3.63</u>		<u>1</u>	<u>0.1</u>	<u>13.8</u>	<u>7.78</u>	<u>NR</u>	<u>NR</u>	<u>5.87</u>	<u>NR</u>	<u>Turbid, lt. brown</u> NR = Not Recorded
				<u>2</u>	<u>0.1</u>	<u>13.6</u>	<u>7.84</u>	↓	↓	<u>5.63</u>	↓	
				<u>3</u>	<u>0.1</u>	<u>13.6</u>	<u>7.88</u>	↓	↓	<u>5.61</u>	↓	
				<u>4</u>	<u>0.1</u>	<u>13.5</u>	<u>7.89</u>	↓	↓	<u>5.63</u>	↓	
				<u>5</u>	<u>0.1</u>	<u>13.5</u>	<u>7.90</u>	↓	↓	<u>5.65</u>	↓	
				<u>6</u>	<u>0.1</u>	<u>13.5</u>	<u>7.92</u>	↓	↓	<u>5.64</u>	↓	



LOW-FLOW GROUNDWATER SAMPLING FORM

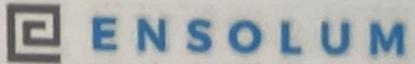
Client: Harkess  
 Project Name: Lat H-21  
 Project Location: \_\_\_\_\_  
 Project Manager: B. Herb

SAMPLING INFORMATION

Date Completed: 5-6-22  
 Total Depth of Monitor Well: 8-00  
 Screen Interval: \_\_\_\_\_  
 Sample Tubing Intake Depth: \_\_\_\_\_  
 Geologist: E. Carroll

Soil Boring / Monitor Well Number: TMW09  
 Project #: \_\_\_\_\_  
 Type of Water Quality Meter: AquaTron  
 Date Calibrated: 5-6-22  
 Other Notes: \_\_\_\_\_

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)	Comments
1	0.1	15.1	6.32	NR	NR	7.55	NR	NR = Not Recorded  Turbid, lb. brown
2	0.1	15.0	6.47	↓	↓	7.54	↓	
3	0.1	14.91	6.55	↓	↓	7.57	↓	
4	0.1	14.87	6.63	↓	↓	7.60	↓	
5	0.1	14.83	6.70	↓	↓	7.61	↓	
6	0.1	14.72	6.73	↓	↓	7.61	↓	
7	0.1	14.71	6.72	↓	↓	7.62	↓	
8	0.1	14.71	6.73	↓	↓	7.62	↓	



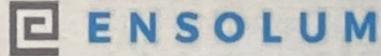
Client: Harvest  
 Project Name: LOT H-21  
 Project Location: \_\_\_\_\_  
 Project Manager: B. Herb

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Soil Boring / Monitor Well Number: TMW 10  
 Project #: \_\_\_\_\_  
 Date Completed: 5-6-22 Type of Water Quality Meter: Aquatroll  
 Total Depth of Monitor Well: 8.20 Date Calibrated: 5-6-22  
 Screen Interval: \_\_\_\_\_ Other Notes: \_\_\_\_\_  
 Sample Tubing Intake Depth: \_\_\_\_\_  
 Geologist: E. Carroll

Measure Well Depth	Tubing Placement	GW Depth (static)	After Purge	Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)	Comments:
		5.88		1	0.1	15.20	6.83	NR	NR	7.01	NR	NR = Not Recorded
				2		14.98	6.85			7.04		
				3		14.79	6.88			7.04		
				4		14.64	6.83			7.00		
				5		14.63	6.84			7.05		
				6		14.61	6.80			7.04		
				7		14.58	6.83			7.04		
				8		14.55	6.82			7.04		
				9		14.53	6.82			7.04		



46

Location Lateral H-21

Date 8/25/22

Project / Client Harvest

R4, 2020 Tacoma, Metal detector / OWEP

1115 - R4 on site to locate MW's after rain event & evaluate condition of MW's

MW08 - not buried, appears to be in normal condition, placed stake w/ green flagging

MW07 - buried under 1-2" sediment, lots of sediment in casing box, cleaned out, placed stake w/ green flagging

MW02 - buried under 3-5" sediment, some sediment in casing box, cleaned out, placed stake w/ green flagging

MW06 - partially buried, good condition, placed stake w/ green flagging

MW01 - buried under ~ 2" sediment, cap still intact, good condition. Placed stake w/ green flagging

MW10 - not buried, good condition

MW03 - buried under 1/2" sediment, pin flag visible, some mud in casing box, good condition, placed stake & green flagging

MW09 - good condition unburied, placed green flagging on existing stake. →

Location  
Project / C

MW  
Soil  
Condi

Well  
MW-

MW-

MW-

tan  
MW

da  
MW

dev  
MW

m  
MW

m  
M

md  
M

c

Location Lateral H-21 continued Date 8/25/22 47  
 Project / Client \_\_\_\_\_

MW04 - buried under woody debris & mud.  
 Some mud in casing box, decent  
 condition. place stake w/ green flagging

Well	DTW	DTTD	
MW-10	5.37	8.30	Bail ~ 6 gal brown tan silty water, good re-charge
MW-03	4.30	6.22	Bail ~ 0.4 gal dark gray, muddy H <sub>2</sub> O, poor recharge
MW-09	5.60	8.08	Bail ~ 3 gal decent recharge
MW04	3.78	5.93	Bail ~ 0.4 gal poor re-charge
MW07	2.60	5.35	Bail ~ 0.5 gal recharge
MW08	3.26	5.97	Bail ~ 0.4 gal poor re-charge
MW02	4.05	5.30	Bail ~ 0.5 gal poor re-charge
MW06	2.62	5.50	Bail 0.75 gal decent recharge
MW01	3.78	4.98	Bail ~ 0.25 gal poor recharge

25/22

condition

in

lots  
at,

me  
red

red

still

visible

Rate in the Rain

1420  
at site



















Client: **Lateral H-21**  
 Project Name: \_\_\_\_\_  
 Project Location: **Harvest**  
 Project Manager: **11-15-2022**

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Soil Boring / Monitor Well Number: **TMW-10**

Project # \_\_\_\_\_

Date Completed: \_\_\_\_\_ Type of Water Quality Meter: \_\_\_\_\_

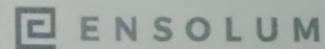
Total Depth of Monitor Well: **8.30** Date Calibrated: \_\_\_\_\_

Screen Interval: \_\_\_\_\_ Other Notes: **1.5 to purge**

Sample Tubing Intake Depth: \_\_\_\_\_

Geologist: \_\_\_\_\_

Sample Interval	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments:
				(minutes)	(L/min)	(°C)	(unless)	(mg/L)	(mV)	(mS/cm)	(feet)	
				14:40	0.2	14.44	6.83	0.42	-43.2	4512	5.3	NR = Not Recorded clear sample @ 15:10
				14:50	0.2	14.19	6.80	0.34	-23.6	4302		
				15:00	0.2	14.12	6.81	0.54	-20.3	4267		
				15:10	0.2	14.12	6.82	0.55	-22.0	4262		
				<del>15:15</del>	<del>0.2</del>							

















LOW-FLOW GROUNDWATER SAMPLING FORM

Client Hervert  
 Project Name Lateral H-21  
 Project Location Large Canyon  
 Project Manager Brooks Herb

SAMPLING INFORMATION

Soil Boring / Monitor Well Number TMW-09  
 Project # 07C 2007010  
 Date Completed 1-19-23 Type of Water Quality Meter Oakton  
 Total Depth of Monitor Well 8.08 Date Calibrated 1-19-23  
 Screen Interval \_\_\_\_\_ Other Notes \_\_\_\_\_  
 Sample Tubing Intake Depth \_\_\_\_\_  
 Geologist ZM

Monitor Well ID	Tubing Placement	GW Depth (static)	After Purge	Time	Purge Rate	Temp.	pH	DO	ORP	Cond.	GW Depth	Comments
				(minutes)	(L/min)	(°C)	(unless)	(mg/L)	(mV)	(µm/cm)	(feet)	
				0	0.3	<del>7.7</del> 7.7	<del>7.12</del> 7.12		<del>1.2</del> -1.2	<del>10.03</del> 9.79		1.4 gal to purge NR = Not Recorded cloudy, swamp odor slow recharge dry at 1.2 gal Sample at 13.40
				5	0.3	7.1	6.94		14.1	9.81		
				10	0.3	6.4	6.92		28.2	9.83		
				15	0.3	5.3	6.83		31.2	10.00		







## APPENDIX B

# Laboratory Analytical Reports

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

February 09, 2022

Brooke Herb

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Lateral H21

OrderNo.: 2201B37

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 9 sample(s) on 1/28/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-01

**Project:** Lateral H21

**Collection Date:** 1/27/2022 3:15:00 PM

**Lab ID:** 2201B37-001

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 1:50:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 1:50:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 1:50:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 1:50:00 PM	R85592
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	2/3/2022 1:50:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-02

**Project:** Lateral H21

**Collection Date:** 1/27/2022 2:42:00 PM

**Lab ID:** 2201B37-002

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 2:10:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 2:10:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 2:10:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 2:10:00 PM	R85592
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	2/3/2022 2:10:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-03

**Project:** Lateral H21

**Collection Date:** 1/27/2022 3:32:00 PM

**Lab ID:** 2201B37-003

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 3:08:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 3:08:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 3:08:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 3:08:00 PM	R85592
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	2/3/2022 3:08:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-04

**Project:** Lateral H21

**Collection Date:** 1/27/2022 1:15:00 PM

**Lab ID:** 2201B37-004

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 3:28:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 3:28:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 3:28:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 3:28:00 PM	R85592
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	2/3/2022 3:28:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-06

**Project:** Lateral H21

**Collection Date:** 1/27/2022 2:50:00 PM

**Lab ID:** 2201B37-005

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 3:48:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 3:48:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 3:48:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 3:48:00 PM	R85592
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	2/3/2022 3:48:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-07

**Project:** Lateral H21

**Collection Date:** 1/27/2022 1:53:00 PM

**Lab ID:** 2201B37-006

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 12:51:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 12:51:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 12:51:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 12:51:00 PM	R85592
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	2/3/2022 12:51:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-08

**Project:** Lateral H21

**Collection Date:** 1/27/2022 2:21:00 PM

**Lab ID:** 2201B37-007

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 4:07:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 4:07:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 4:07:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 4:07:00 PM	R85592
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	2/3/2022 4:07:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-09

**Project:** Lateral H21

**Collection Date:** 1/27/2022 12:57:00 PM

**Lab ID:** 2201B37-008

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 4:27:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 4:27:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 4:27:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 4:27:00 PM	R85592
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	2/3/2022 4:27:00 PM	R85592

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

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

**Analytical Report**

Lab Order 2201B37

Date Reported: 2/9/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-10

**Project:** Lateral H21

**Collection Date:** 1/27/2022 12:31:00 PM

**Lab ID:** 2201B37-009

**Matrix:** GROUNDWA

**Received Date:** 1/28/2022 9:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	1.0		µg/L	1	2/3/2022 4:46:00 PM	R85592
Toluene	ND	1.0		µg/L	1	2/3/2022 4:46:00 PM	R85592
Ethylbenzene	ND	1.0		µg/L	1	2/3/2022 4:46:00 PM	R85592
Xylenes, Total	ND	2.0		µg/L	1	2/3/2022 4:46:00 PM	R85592
Surr: 4-Bromofluorobenzene	94.3	70-130		%Rec	1	2/3/2022 4:46:00 PM	R85592

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2201B37

09-Feb-22

**Client:** Harvest  
**Project:** Lateral H21

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>R85592</b>		RunNo: <b>85592</b>							
Prep Date:	Analysis Date: <b>2/3/2022</b>		SeqNo: <b>3013049</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.6	80	120			
Toluene	19	1.0	20.00	0	95.9	80	120			
Ethylbenzene	19	1.0	20.00	0	97.0	80	120			
Xylenes, Total	57	2.0	60.00	0	95.3	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		94.1	70	130			

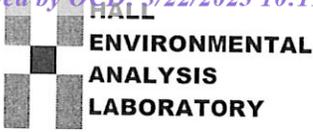
Sample ID: <b>mb</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBW</b>	Batch ID: <b>R85592</b>		RunNo: <b>85592</b>							
Prep Date:	Analysis Date: <b>2/3/2022</b>		SeqNo: <b>3013050</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	17		20.00		86.7	70	130			

Sample ID: <b>2201b37-002a ms</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>TMW-02</b>	Batch ID: <b>R85592</b>		RunNo: <b>85592</b>							
Prep Date:	Analysis Date: <b>2/3/2022</b>		SeqNo: <b>3013505</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	80	120			
Toluene	20	1.0	20.00	0	102	80	120			
Ethylbenzene	20	1.0	20.00	0	99.9	80	120			
Xylenes, Total	60	2.0	60.00	0	99.4	80	120			
Surr: 4-Bromofluorobenzene	18		20.00		90.3	70	130			

Sample ID: <b>2201B37-002A MSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>TMW-02</b>	Batch ID: <b>R85592</b>		RunNo: <b>85592</b>							
Prep Date:	Analysis Date: <b>2/3/2022</b>		SeqNo: <b>3013506</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	96.6	80	120	4.75	20	
Toluene	20	1.0	20.00	0	97.7	80	120	4.03	20	
Ethylbenzene	20	1.0	20.00	0	98.2	80	120	1.69	20	
Xylenes, Total	59	2.0	60.00	0	98.0	80	120	1.37	20	
Surr: 4-Bromofluorobenzene	18		20.00		90.2	70	130	0	0	

**Qualifiers:**

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



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

Sample Log-In Check List

Client Name: Harvest Work Order Number: 2201B37 RcptNo: 1

Received By: Sean Livingston 1/28/2022 9:00:00 AM
Completed By: Cheyenne Cason 1/31/2022 8:52:09 AM
Reviewed By: [Signature] 1-31-22

[Handwritten signatures]

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

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

# of preserved bottles checked for pH: TO 1/31/22 (<2 or >12 unless noted)
Adjusted?
Checked by:

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: [ ] Date: [ ]
By Whom: [ ] Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person [ ]
Regarding: [ ]
Client Instructions: [ ]

16. Additional remarks:

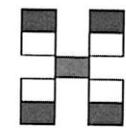
17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Contains 2 rows of data.

# Chain-of-Custody Record

Client: Harvest Midstream  
 attn: Monica Smith  
 Mailing Address: 1755 Arroyo Dr  
Bloomfield, NM  
 Phone #:  
 email or Fax#: m.smith@harvestmidstream.com  
 QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other \_\_\_\_\_  
 EDD (Type) PDF

Turn-Around Time:  
 Standard  Rush  
 Project Name:  
Lateral H21  
 Project #:  
TE 090321009  
 Project Manager:  
Brooke Herb  
 Sampler: Reece Hanson  
 On Ice:  Yes  No  
 # of Coolers: 2  
 Cooler Temp (including CF): 0.4 to 1 = 0.5 (°C)



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

### Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX	MTBE / TMB's (6024)	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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1/21/22	1515	GW	TMW-01	2 VOA	HCl	2201337	X										
	1442		TMW-02	3 VOA			X										
	1532		TMW-03				X										
	1315		TMW-04				X										
	1450		TMW-06				X										
	1353		TMW-07	1 VOA			X										
	1421		TMW-08				X										
	1257		TMW-09				X										
	1231		TMW-10				X										

Date: 1/21/22 Time: 10:08 Relinquished by: [Signature]  
 Received by: [Signature] Via: \_\_\_\_\_ Date Time: 1/28/22 1000  
 Date: 1/28/22 Time: 11:00 Relinquished by: [Signature]  
 Received by: [Signature] Via: \_\_\_\_\_ Date Time: 1/28/22 9:00

Remarks:  
cc: brooke.herb@wsp.com  
reece.hanson@wsp.com

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 noted on the analytical report.



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

May 19, 2022

Monica Smith

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Lateral H-21

OrderNo.: 2205492

Dear Monica Smith:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/11/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order 2205492

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW01

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 12:37:00 PM

**Lab ID:** 2205492-001

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0	P	µg/L	1	5/13/2022 2:18:00 PM	R87985
Toluene	ND	1.0	P	µg/L	1	5/13/2022 2:18:00 PM	R87985
Ethylbenzene	ND	1.0	P	µg/L	1	5/13/2022 2:18:00 PM	R87985
Xylenes, Total	ND	2.0	P	µg/L	1	5/13/2022 2:18:00 PM	R87985
Surr: 4-Bromofluorobenzene	98.6	70-130	P	%Rec	1	5/13/2022 2:18:00 PM	R87985

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

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

**Analytical Report**

Lab Order **2205492**

Date Reported: **5/19/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW02

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 1:00:00 PM

**Lab ID:** 2205492-002

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/13/2022 2:37:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/13/2022 2:37:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 2:37:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/13/2022 2:37:00 PM	R87985
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	5/13/2022 2:37:00 PM	R87985

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

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

**Analytical Report**

Lab Order 2205492

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW03

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 1:50:00 PM

**Lab ID:** 2205492-003

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/13/2022 2:57:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/13/2022 2:57:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 2:57:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/13/2022 2:57:00 PM	R87985
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	5/13/2022 2:57:00 PM	R87985

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

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

**Analytical Report**

Lab Order 2205492

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW04

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 1:35:00 PM

**Lab ID:** 2205492-004

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>BRM</b>
Benzene	ND	1.0		µg/L	1	5/17/2022 12:26:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/17/2022 12:26:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/17/2022 12:26:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/17/2022 12:26:00 PM	R87985
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	5/17/2022 12:26:00 PM	R87985

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

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

**Analytical Report**

Lab Order **2205492**

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW06

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 12:45:00 PM

**Lab ID:** 2205492-005

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/13/2022 3:36:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/13/2022 3:36:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 3:36:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/13/2022 3:36:00 PM	R87985
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	5/13/2022 3:36:00 PM	R87985

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

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

**Analytical Report**

Lab Order **2205492**

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW07

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 1:20:00 PM

**Lab ID:** 2205492-006

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/13/2022 3:56:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/13/2022 3:56:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 3:56:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/13/2022 3:56:00 PM	R87985
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	5/13/2022 3:56:00 PM	R87985

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

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

**Analytical Report**

Lab Order 2205492

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW08

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 1:10:00 PM

**Lab ID:** 2205492-007

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	5/13/2022 4:15:00 PM	R87985
Toluene	ND	1.0		µg/L	1	5/13/2022 4:15:00 PM	R87985
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 4:15:00 PM	R87985
Xylenes, Total	ND	2.0		µg/L	1	5/13/2022 4:15:00 PM	R87985
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	5/13/2022 4:15:00 PM	R87985

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

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

**Analytical Report**

Lab Order **2205492**

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW09

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 12:30:00 PM

**Lab ID:** 2205492-008

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0	P	µg/L	1	5/13/2022 4:35:00 PM	R87985
Toluene	ND	1.0	P	µg/L	1	5/13/2022 4:35:00 PM	R87985
Ethylbenzene	ND	1.0	P	µg/L	1	5/13/2022 4:35:00 PM	R87985
Xylenes, Total	ND	2.0	P	µg/L	1	5/13/2022 4:35:00 PM	R87985
Surr: 4-Bromofluorobenzene	99.5	70-130	P	%Rec	1	5/13/2022 4:35:00 PM	R87985

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

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

**Analytical Report**

Lab Order **2205492**

Date Reported: 5/19/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** MW10

**Project:** Lateral H-21

**Collection Date:** 5/6/2022 12:15:00 PM

**Lab ID:** 2205492-009

**Matrix:** WASTE WAT

**Received Date:** 5/11/2022 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0	P	µg/L	1	5/13/2022 5:15:00 PM	R87985
Toluene	ND	1.0	P	µg/L	1	5/13/2022 5:15:00 PM	R87985
Ethylbenzene	ND	1.0	P	µg/L	1	5/13/2022 5:15:00 PM	R87985
Xylenes, Total	ND	2.0	P	µg/L	1	5/13/2022 5:15:00 PM	R87985
Surr: 4-Bromofluorobenzene	99.6	70-130	P	%Rec	1	5/13/2022 5:15:00 PM	R87985

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2205492

19-May-22

**Client:** Harvest  
**Project:** Lateral H-21

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>R87985</b>	RunNo: <b>87985</b>								
Prep Date:	Analysis Date: <b>5/13/2022</b>	SeqNo: <b>3118840</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.2	80	120			
Toluene	19	1.0	20.00	0	92.6	80	120			
Ethylbenzene	19	1.0	20.00	0	93.5	80	120			
Xylenes, Total	56	2.0	60.00	0	93.5	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		97.0	70	130			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBW</b>	Batch ID: <b>R87985</b>	RunNo: <b>87985</b>								
Prep Date:	Analysis Date: <b>5/13/2022</b>	SeqNo: <b>3118841</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	19		20.00		96.9	70	130			

Sample ID: <b>2205492-002a ms</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>MW02</b>	Batch ID: <b>R87985</b>	RunNo: <b>87985</b>								
Prep Date:	Analysis Date: <b>5/13/2022</b>	SeqNo: <b>3118853</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.8	80	120			
Toluene	19	1.0	20.00	0	97.2	80	120			
Ethylbenzene	19	1.0	20.00	0	97.0	80	120			
Xylenes, Total	58	2.0	60.00	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	19		20.00		96.6	70	130			

Sample ID: <b>2205492-002A MSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>MW02</b>	Batch ID: <b>R87985</b>	RunNo: <b>87985</b>								
Prep Date:	Analysis Date: <b>5/13/2022</b>	SeqNo: <b>3118854</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.0	80	120	5.20	20	
Toluene	18	1.0	20.00	0	92.0	80	120	5.44	20	
Ethylbenzene	19	1.0	20.00	0	93.2	80	120	4.04	20	
Xylenes, Total	56	2.0	60.00	0	93.5	80	120	3.80	20	
Surr: 4-Bromofluorobenzene	20		20.00		98.8	70	130	0	0	

**Qualifiers:**

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



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

Sample Log-In Check List

Client Name: Harvest

Work Order Number: 2205492

RcptNo: 1

Received By: Juan Rojas 5/11/2022 7:10:00 AM

[Signature]

Completed By: Tracy Casarrubias 5/11/2022 8:38:03 AM

Reviewed By: [Signature] 5/11/22

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

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

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: [Signature] 5.11.22

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: [ ] Date: [ ]
By Whom: [ ] Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person [ ]
Regarding: [ ]
Client Instructions: [ ]

16. Additional remarks:

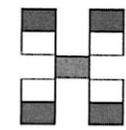
17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 1.1, Good, Yes, [ ], [ ], [ ]

# Chain-of-Custody Record

Client: Harvest Four corners  
Monica Smith  
 Mailing Address:  
 Phone #:  
 email or Fax#: m.smith@harvestmidstream.com  
 QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other  
 EDD (Type)

Turn-Around Time:  
 Standard  Rush  
 Project Name:  
Lateral L-2  
 Project #:  
 Project Manager:  
Brooke Herb  
 Sampler: E. Carroll  
 On Ice:  Yes  No  
 # of Coolers: 1  
 Cooler Temp (including CF): 1.1-0=1.1 (°C)



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

### Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BIEX / 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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5-6	<del>5-6</del> 12:37	GW	MW01	3 roA	Hcl	001	X									
	13:00		MW02			002	X									
	13:50		MW03			003	X									
	13:35		MW04			004	X									
	12:45		MW06			005	X									
	13:20		MW07			006	X									
	13:10		MW08			007	X									
	12:50		MW09			008	X									
	12:15		MW10			009	X									

Date: 5/10 Time: 1447 Relinquished by: Eric Carroll  
 Received by: Christa Wacker Via: 5/10/22 Date: 5/10/22 Time: 1447  
 Date: 5/10/22 Time: 1812 Relinquished by: Christa Wacker  
 Received by: Brooke Herb Via: 5/11/22 Date: 5/11/22 Time: 7:10

Remarks:  
Please cc: ecarroll@ensolam.com

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.



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

September 01, 2022

Brooke Herb

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Lateral H 21

OrderNo.: 2208H05

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/27/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order **2208H05**

Date Reported: 9/1/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW01

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:47:00 AM

**Lab ID:** 2208H05-001

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 9:09:44 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 9:09:44 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 9:09:44 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 9:09:44 PM	D90700
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	8/31/2022 9:09:44 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW02

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:30:00 AM

**Lab ID:** 2208H05-002

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 10:20:07 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 10:20:07 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 10:20:07 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 10:20:07 PM	D90700
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	8/31/2022 10:20:07 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW03

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 10:48:00 AM

**Lab ID:** 2208H05-003

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 10:43:36 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 10:43:36 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 10:43:36 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 10:43:36 PM	D90700
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	8/31/2022 10:43:36 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW04

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:04:00 AM

**Lab ID:** 2208H05-004

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 11:07:05 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 11:07:05 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 11:07:05 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 11:07:05 PM	D90700
Surr: 4-Bromofluorobenzene	92.5	70-130		%Rec	1	8/31/2022 11:07:05 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW06

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:38:00 AM

**Lab ID:** 2208H05-005

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 11:30:26 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 11:30:26 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 11:30:26 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 11:30:26 PM	D90700
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	8/31/2022 11:30:26 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW07

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:15:00 AM

**Lab ID:** 2208H05-006

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	8/31/2022 11:53:48 PM	D90700
Toluene	ND	1.0		µg/L	1	8/31/2022 11:53:48 PM	D90700
Ethylbenzene	ND	1.0		µg/L	1	8/31/2022 11:53:48 PM	D90700
Xylenes, Total	ND	2.0		µg/L	1	8/31/2022 11:53:48 PM	D90700
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	8/31/2022 11:53:48 PM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW08

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 11:24:00 AM

**Lab ID:** 2208H05-007

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	9/1/2022 12:17:15 AM	D90700
Toluene	ND	1.0		µg/L	1	9/1/2022 12:17:15 AM	D90700
Ethylbenzene	ND	1.0		µg/L	1	9/1/2022 12:17:15 AM	D90700
Xylenes, Total	ND	2.0		µg/L	1	9/1/2022 12:17:15 AM	D90700
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	9/1/2022 12:17:15 AM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: 9/1/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW09

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 10:56:00 AM

**Lab ID:** 2208H05-008

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	9/1/2022 12:40:40 AM	D90700
Toluene	ND	1.0		µg/L	1	9/1/2022 12:40:40 AM	D90700
Ethylbenzene	ND	1.0		µg/L	1	9/1/2022 12:40:40 AM	D90700
Xylenes, Total	ND	2.0		µg/L	1	9/1/2022 12:40:40 AM	D90700
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	9/1/2022 12:40:40 AM	D90700

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

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

**Analytical Report**

Lab Order **2208H05**

Date Reported: **9/1/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW10

**Project:** Lateral H 21

**Collection Date:** 8/26/2022 10:38:00 AM

**Lab ID:** 2208H05-009

**Matrix:** AQUEOUS

**Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	1.0		µg/L	1	9/1/2022 1:04:05 AM	D90700
Toluene	ND	1.0		µg/L	1	9/1/2022 1:04:05 AM	D90700
Ethylbenzene	ND	1.0		µg/L	1	9/1/2022 1:04:05 AM	D90700
Xylenes, Total	ND	2.0		µg/L	1	9/1/2022 1:04:05 AM	D90700
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	9/1/2022 1:04:05 AM	D90700

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

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2208H05

01-Sep-22

**Client:** Harvest  
**Project:** Lateral H 21

Sample ID: <b>mb-II</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBW</b>	Batch ID: <b>D90700</b>		RunNo: <b>90700</b>							
Prep Date:	Analysis Date: <b>8/31/2022</b>		SeqNo: <b>3241915</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	18		20.00		92.0	70	130			

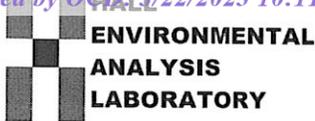
Sample ID: <b>100ng btex lcs-II</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>D90700</b>		RunNo: <b>90700</b>							
Prep Date:	Analysis Date: <b>8/31/2022</b>		SeqNo: <b>3241916</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.5	70	130			
Toluene	18	1.0	20.00	0	92.3	70	130			
Ethylbenzene	18	1.0	20.00	0	91.4	70	130			
Xylenes, Total	55	2.0	60.00	0	91.1	70	130			
Surr: 4-Bromofluorobenzene	19		20.00		93.8	70	130			

Sample ID: <b>2208h05-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>TMW01</b>	Batch ID: <b>D90700</b>		RunNo: <b>90700</b>							
Prep Date:	Analysis Date: <b>8/31/2022</b>		SeqNo: <b>3241918</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0.2880	87.8	70	130			
Toluene	19	1.0	20.00	0	93.2	70	130			
Ethylbenzene	19	1.0	20.00	0	92.6	70	130			
Xylenes, Total	55	2.0	60.00	0	92.0	70	130			
Surr: 4-Bromofluorobenzene	20		20.00		97.6	70	130			

Sample ID: <b>2208h05-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>TMW01</b>	Batch ID: <b>D90700</b>		RunNo: <b>90700</b>							
Prep Date:	Analysis Date: <b>8/31/2022</b>		SeqNo: <b>3241919</b>		Units: <b>µg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0.2880	84.9	70	130	3.23	20	
Toluene	18	1.0	20.00	0	88.4	70	130	5.28	20	
Ethylbenzene	18	1.0	20.00	0	88.6	70	130	4.32	20	
Xylenes, Total	53	2.0	60.00	0	88.8	70	130	3.53	20	
Surr: 4-Bromofluorobenzene	19		20.00		94.1	70	130	0	0	

**Qualifiers:**

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



# Sample Log-In Check List

Client Name: Harvest

Work Order Number: 2208H05

RcptNo: 1

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

Completed By: Tracy Casarrubias 8/27/2022 12:14:37 PM

Reviewed By: JN 8/29/22

### Chain of Custody

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

### Log In

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

# of preserved bottles checked for pH: \_\_\_\_\_  
(<2 or >12 unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: KPC 8-29-22

### Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

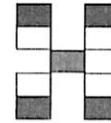
### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

# Chain-of-Custody Record

Client: Harvest Midstream  
Monica Smith  
 Mailing Address:  
 Phone #:  
 email or Fax#: monica.smith@harvestmidstream.com  
 QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  NELAC  Other  
 EDD (Type) PDF

Turn-Around Time:  
 Standard  Rush  
 Project Name:  
Lateral H-21  
 Project #:  
 Project Manager:  
Brooke Herb  
 Sampler: Grey Palese  
 On Ice:  Yes  No  
 # of Coolers: 1  
 Cooler Temp (including CF): 2.8 - 0 = 2.8 (°C)



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

### Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/26	11:47	GW	TMW 01	3 Vials	HgCl <sub>2</sub>	001	X										
	11:30		TMW 02		HgCl <sub>2</sub>	002	X										
	10:48		TMW 03		HCl	003	X										
	11:04		TMW 04		HCl	004	X										
<del>TMW 05</del>																	
	11:38		TMW 06		HgCl <sub>2</sub>	005	X										
	11:15		TMW 07		HgCl <sub>2</sub>	006	X										
	11:24		TMW 08		HgCl <sub>2</sub>	007	X										
✓	10:56	✓	TMW 09		HCl	008	X										
✓	10:38	✓	TMW 10		HCl	009	X										

Date: 8/26/22 Time: 1442 Relinquished by: Grey Palm  
 Received by: Christina Via: can Date: 8/26/22 Time: 1442  
 Date: 8/24/22 Time: 1753 Relinquished by: Christina  
 Received by: [Signature] Date: 8/27/22 Time: 9:35

Remarks:  
 cc: bherb@ensolum.com  
gpalese@ensolum.com



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

November 21, 2022

Brooke Herb

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H-21

OrderNo.: 2211876

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 9 sample(s) on 11/16/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-01

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 11:55:00 AM

**Lab ID:** 2211876-001

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
Toluene	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
Ethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
Xylenes, Total	ND	3.0	D	µg/L	2	11/17/2022 5:43:43 PM	SL92675
Surr: 1,2-Dichloroethane-d4	110	70-130	D	%Rec	2	11/17/2022 5:43:43 PM	SL92675
Surr: 4-Bromofluorobenzene	93.4	70-130	D	%Rec	2	11/17/2022 5:43:43 PM	SL92675
Surr: Dibromofluoromethane	110	70-130	D	%Rec	2	11/17/2022 5:43:43 PM	SL92675
Surr: Toluene-d8	88.3	70-130	D	%Rec	2	11/17/2022 5:43:43 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2211876

Date Reported: 11/21/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest

Client Sample ID: TMW-02

Project: Lateral H-21

Collection Date: 11/15/2022 1:20:00 PM

Lab ID: 2211876-002

Matrix: AQUEOUS

Received Date: 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: JR
Benzene	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:12:27 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 6:12:27 PM	SL92675
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	11/17/2022 6:12:27 PM	SL92675
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	11/17/2022 6:12:27 PM	SL92675
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/17/2022 6:12:27 PM	SL92675
Surr: Toluene-d8	87.9	70-130		%Rec	1	11/17/2022 6:12:27 PM	SL92675

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

Qualifiers:			
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 2 of 10

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-03

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 2:30:00 PM

**Lab ID:** 2211876-003

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 6:41:10 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 6:41:10 PM	SL92675
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	11/17/2022 6:41:10 PM	SL92675
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/17/2022 6:41:10 PM	SL92675
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/17/2022 6:41:10 PM	SL92675
Surr: Toluene-d8	89.2	70-130		%Rec	1	11/17/2022 6:41:10 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-04

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 2:05:00 PM

**Lab ID:** 2211876-004

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
Toluene	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
Ethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
Xylenes, Total	ND	3.0	D	µg/L	2	11/17/2022 7:09:52 PM	SL92675
Surr: 1,2-Dichloroethane-d4	108	70-130	D	%Rec	2	11/17/2022 7:09:52 PM	SL92675
Surr: 4-Bromofluorobenzene	93.0	70-130	D	%Rec	2	11/17/2022 7:09:52 PM	SL92675
Surr: Dibromofluoromethane	113	70-130	D	%Rec	2	11/17/2022 7:09:52 PM	SL92675
Surr: Toluene-d8	87.8	70-130	D	%Rec	2	11/17/2022 7:09:52 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-06

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 12:25:00 PM

**Lab ID:** 2211876-005

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 7:38:30 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 7:38:30 PM	SL92675
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	11/17/2022 7:38:30 PM	SL92675
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/17/2022 7:38:30 PM	SL92675
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/17/2022 7:38:30 PM	SL92675
Surr: Toluene-d8	88.6	70-130		%Rec	1	11/17/2022 7:38:30 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order 2211876

Date Reported: 11/21/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-07

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 1:45:00 PM

**Lab ID:** 2211876-006

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: JR
Benzene	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:07:06 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 8:07:06 PM	SL92675
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	11/17/2022 8:07:06 PM	SL92675
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	11/17/2022 8:07:06 PM	SL92675
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/17/2022 8:07:06 PM	SL92675
Surr: Toluene-d8	89.6	70-130		%Rec	1	11/17/2022 8:07:06 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-08

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 1:00:00 PM

**Lab ID:** 2211876-007

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 8:35:42 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 8:35:42 PM	SL92675
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	11/17/2022 8:35:42 PM	SL92675
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	11/17/2022 8:35:42 PM	SL92675
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/17/2022 8:35:42 PM	SL92675
Surr: Toluene-d8	89.5	70-130		%Rec	1	11/17/2022 8:35:42 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-09

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 3:40:00 PM

**Lab ID:** 2211876-008

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:04:18 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 9:04:18 PM	SL92675
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	11/17/2022 9:04:18 PM	SL92675
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	11/17/2022 9:04:18 PM	SL92675
Surr: Dibromofluoromethane	113	70-130		%Rec	1	11/17/2022 9:04:18 PM	SL92675
Surr: Toluene-d8	85.8	70-130		%Rec	1	11/17/2022 9:04:18 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2211876**

Date Reported: **11/21/2022**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-10

**Project:** Lateral H-21

**Collection Date:** 11/15/2022 3:10:00 PM

**Lab ID:** 2211876-009

**Matrix:** AQUEOUS

**Received Date:** 11/16/2022 6:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>JR</b>
Benzene	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
Toluene	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 9:32:51 PM	SL92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 9:32:51 PM	SL92675
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	11/17/2022 9:32:51 PM	SL92675
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	11/17/2022 9:32:51 PM	SL92675
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/17/2022 9:32:51 PM	SL92675
Surr: Toluene-d8	88.4	70-130		%Rec	1	11/17/2022 9:32:51 PM	SL92675

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2211876

21-Nov-22

**Client:** Harvest  
**Project:** Lateral H-21

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>SL92675</b>	RunNo: <b>92675</b>								
Prep Date:	Analysis Date: <b>11/17/2022</b>	SeqNo: <b>3334460</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	96.0	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.5	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.9		10.00		88.6	70	130			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>PBW</b>	Batch ID: <b>SL92675</b>	RunNo: <b>92675</b>								
Prep Date:	Analysis Date: <b>11/17/2022</b>	SeqNo: <b>3334470</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.7		10.00		86.6	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: Harvest Work Order Number: 2211876 RcptNo: 1

Received By: Tracy Casarrubias 11/16/2022 6:25:00 AM

Completed By: Tracy Casarrubias 11/16/2022 6:53:46 AM

Reviewed By: SC 11/16/22

Chain of Custody

1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]

4. Were all samples received at a temperature of >0° C to 6.0°C Yes [ ] No [checked] NA [ ]

Samples not Frozen

5. Sample(s) in proper container(s)? Yes [checked] No [ ]

6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]

7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]

8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [checked] No [ ] NA [ ]

10. Were any sample containers received broken? Yes [ ] No [checked]

11. Does paperwork match bottle labels? Yes [checked] No [ ]

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]

13. Is it clear what analyses were requested? Yes [checked] No [ ]

14. Were all holding times able to be met? Yes [checked] No [ ]

(If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? Checked by: SC 11/16/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: [ ] Date: [ ]
By Whom: [ ] Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person [ ]
Regarding: [ ]
Client Instructions: [ ]

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, -0.1, Good, Yes, [ ], [ ], [ ]





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

January 27, 2023

Brooke Herb

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 21

OrderNo.: 2301790

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 9 sample(s) on 1/20/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-01

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 11:25:00 AM

**Lab ID:** 2301790-001

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 5:07:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 5:07:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 5:07:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 5:07:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	1/25/2023 5:07:00 PM	SL94167
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/25/2023 5:07:00 PM	SL94167
Surr: Toluene-d8	94.3	70-130		%Rec	1	1/25/2023 5:07:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-02

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 12:20:00 PM

**Lab ID:** 2301790-002

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 5:31:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 5:31:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 5:31:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 5:31:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	1/25/2023 5:31:00 PM	SL94167
Surr: Dibromofluoromethane	109	70-130		%Rec	1	1/25/2023 5:31:00 PM	SL94167
Surr: Toluene-d8	96.3	70-130		%Rec	1	1/25/2023 5:31:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-03

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 2:00:00 PM

**Lab ID:** 2301790-003

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 5:54:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 5:54:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 5:54:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 5:54:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	1/25/2023 5:54:00 PM	SL94167
Surr: Dibromofluoromethane	116	70-130		%Rec	1	1/25/2023 5:54:00 PM	SL94167
Surr: Toluene-d8	95.8	70-130		%Rec	1	1/25/2023 5:54:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-04

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 1:20:00 PM

**Lab ID:** 2301790-004

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 6:17:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 6:17:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 6:17:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 6:17:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	1/25/2023 6:17:00 PM	SL94167
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/25/2023 6:17:00 PM	SL94167
Surr: Toluene-d8	93.1	70-130		%Rec	1	1/25/2023 6:17:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-06

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 11:55:00 AM

**Lab ID:** 2301790-005

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 6:40:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 6:40:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 6:40:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 6:40:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	1/25/2023 6:40:00 PM	SL94167
Surr: Dibromofluoromethane	111	70-130		%Rec	1	1/25/2023 6:40:00 PM	SL94167
Surr: Toluene-d8	96.1	70-130		%Rec	1	1/25/2023 6:40:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-07

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 1:00:00 PM

**Lab ID:** 2301790-006

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 7:03:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 7:03:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 7:03:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 7:03:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	1/25/2023 7:03:00 PM	SL94167
Surr: Dibromofluoromethane	113	70-130		%Rec	1	1/25/2023 7:03:00 PM	SL94167
Surr: Toluene-d8	97.4	70-130		%Rec	1	1/25/2023 7:03:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-08

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 12:40:00 PM

**Lab ID:** 2301790-007

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 7:26:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 7:26:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 7:26:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 7:26:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	1/25/2023 7:26:00 PM	SL94167
Surr: Dibromofluoromethane	114	70-130		%Rec	1	1/25/2023 7:26:00 PM	SL94167
Surr: Toluene-d8	96.3	70-130		%Rec	1	1/25/2023 7:26:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-09

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 1:40:00 PM

**Lab ID:** 2301790-008

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 7:49:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 7:49:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 7:49:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 7:49:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	1	1/25/2023 7:49:00 PM	SL94167
Surr: Dibromofluoromethane	114	70-130		%Rec	1	1/25/2023 7:49:00 PM	SL94167
Surr: Toluene-d8	94.8	70-130		%Rec	1	1/25/2023 7:49:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

**Analytical Report**

Lab Order **2301790**

Date Reported: **1/27/2023**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Harvest

**Client Sample ID:** TMW-10

**Project:** Lateral H 21

**Collection Date:** 1/19/2023 2:30:00 PM

**Lab ID:** 2301790-009

**Matrix:** AQUEOUS

**Received Date:** 1/20/2023 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>CCM</b>
Benzene	ND	1.0		µg/L	1	1/25/2023 8:12:00 PM	SL94167
Toluene	ND	1.0		µg/L	1	1/25/2023 8:12:00 PM	SL94167
Ethylbenzene	ND	1.0		µg/L	1	1/25/2023 8:12:00 PM	SL94167
Xylenes, Total	ND	1.5		µg/L	1	1/25/2023 8:12:00 PM	SL94167
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	1/25/2023 8:12:00 PM	SL94167
Surr: Dibromofluoromethane	112	70-130		%Rec	1	1/25/2023 8:12:00 PM	SL94167
Surr: Toluene-d8	94.9	70-130		%Rec	1	1/25/2023 8:12:00 PM	SL94167

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2301790

27-Jan-23

**Client:** Harvest  
**Project:** Lateral H 21

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>SL94167</b>	RunNo: <b>94167</b>								
Prep Date:	Analysis Date: <b>1/25/2023</b>	SeqNo: <b>3401647</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		115	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260: Volatiles Short List</b>								
Client ID: <b>PBW</b>	Batch ID: <b>SL94167</b>	RunNo: <b>94167</b>								
Prep Date:	Analysis Date: <b>1/25/2023</b>	SeqNo: <b>3401648</b>	Units: <b>µg/L</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		114	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: Harvest Work Order Number: 2301790 RcptNo: 1

Received By: Juan Rojas 1/20/2023 7:10:00 AM
Completed By: Sean Livingston 1/20/2023 10:41:11 AM
Reviewed By: [Signature] 1-20-23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

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

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: [Signature] 1/20/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: [ ] Date: [ ]
By Whom: [ ] Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person [ ]
Regarding: [ ]
Client Instructions: [ ]

16. Additional remarks:

17. Cooler information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 0.4, Good, Not Present, YOGI, [ ], [ ]





## APPENDIX C

### Photographic Log

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**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 199664

**CONDITIONS**

Operator: Harvest Four Corners, LLC 1755 Arroyo Dr Bloomfield, NM 87413	OGRID: 373888
	Action Number: 199664
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
nvelez	None	5/15/2023