#### APPROVED By Nelson Velez at 4:16 pm, Jan 03, 2022

1 Ale O w M the Revised Stage 1 Abatement Plan & Proposed Public Notice and Participation: Correct 1 of 129 satisfactory

- 1. OCD approves this current revised Stage 1 Abatement Plan & Proposed Public Notice and Participation
- 2. Continue quarterly groundwater monitoring until eight consecutive quarters of compliance with NMWQCC standards is achieved in lieu of submitting a Stage 2 Abatement Plan
- 3. If contaminant concentrations rebound and exceed NMWQCC standards, a Stage 2 Abatement Plan per NMAC 19.15.30 remediation alternative must be completed
- 4. OCD approves the public notice and participation draft associated with a Stage 1 Abatement Plan to address groundwater impacts identified at the Lateral H-21 pipeline release per 19.15.30.15 NMAC
- 5. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022

HARVEST FOUR CORNERS, LLC

#### REVISED STAGE 1 ABATEMENT PLAN LATERAL H-21 PIPELINE RELEASE INCIDENT # NCS1907233330

JUNE 24, 2021







## REVISED STAGE 1 ABATEMENT PLAN

LATERAL H-21 PIPELINE RELEASE INCIDENT # NCS1907233330

HARVEST FOUR CORNERS, LLC

PROJECT NO.: TE090321009 DATE: JUNE 24, 2021

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June 24, 2021

New Mexico Energy, Minerals and Natural Resources Department New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

**Subject:** Revised Stage 1 Abatement Plan

Lateral H-21 Pipeline Release Incident # NCS1907233330

To Whom It May Concern:

On behalf of Harvest Four Corners, LLC (Harvest), WSP USA Inc. (WSP), presents the following Revised Stage 1 Abatement Plan (AP-126-0) associated with subsurface hydrocarbon impacts encountered at the Lateral H-21 pipeline release (Site). This plan details the site description and background, initial response and assessment, site geologic and hydrologic characteristics, excavation activities, and monitoring well installation and sampling activities. The plan proposes additional monitoring activities and provides a proposed schedule for completion of those activities.

A previous version of a Stage 1 Abatement Plan was submitted to the New Mexico Oil Conservation Division (NMOCD) on July 31, 2019, and then resubmitted again on November 13, 2019, and January 29, 2020. Due to changing site conditions and a lack of response from the NMOCD regarding acknowledgement of receipt or approval of the preceding plans, Harvest respectfully requests that this current revised version replaces the previous submittals that have yet to be approved.

Yours sincerely,

Danny Burns

Consultant, Geologist

cc: Monica Smith, Harvest Midstream

Ashley L. Ager, MS, PG

Assistant Vice President, Geologist



# TABLE OF CONTENTS

1	SITE DESCRIPTION AND BACKGROUND	1
1.1	Regional Geology and Hydrology	1
1.2	Local Geology and Hydrology	1
1.3	Land and Water Use	2
1.4	Initial Response	2
1.5	Initial Remediation Activities	2
2	GROUNDWATER SITE INVESTIGATION	3
2.1	Open Excavation Fluid Recovery and Water Samples	3
2.2	Temporary Monitoring Well Installation	3
2.3	Groundwater Sampling	3
2.4	Results	4
2.5	Conclusions	5
2.6	Quality Assurance	5
3	RECOMMENDATIONS	6
3.1	Proposed Groundwater Monitoring	6
3.2	Proposed Schedule	6
RIRI I	OGRAPHY	7



#### **FIGURES**

FIGURE 1: SITE LOCATION MAP FIGURE 2: RECEPTOR MAP

FIGURE 3: SOIL ANALYTICAL RESULTS

FIGURE 4: GROUNDWATER ANALYTICAL RESULTS

#### **TABLES**

TABLE 1: SOIL ANALYTICAL RESULTS

TABLE 2: GROUNDWATER ANALYTICAL RESULTS TABLE 3: GROUNDWATER ELEVATION SUMMARY

#### **APPENDICES**

APPENDIX A BORE LOGS

APPENDIX B LABORATORY ANALYTICAL REPORTS

# 1 SITE DESCRIPTION AND BACKGROUND

The Site is located approximately 300 feet east of Largo Canyon Wash in Dogie Canyon between Julian Canyon and Forbes Canyon in Unit F of Section 4, Township 25 North, Range 6 West, Rio Arriba County, New Mexico, approximately 28 miles southeast of Blanco, New Mexico (Figure 1). The Site is an active pipeline that transports gas to the Dogie Compression Station which is located approximately 1,750 feet to the northwest. On March 12, 2019, an unknown volume of produced water and natural gas condensate and approximately 658 million cubic feet (MCF) of natural gas were released from the Lateral H-21 pipeline 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.

#### 1.1 REGIONAL GEOLOGY AND HYDROLOGY

The area is regionally described as the Regina Member and the Cuba Mesa Member of the Eocene San Jose Formation (Baltz and West, 1967). To the east of the Site, in the valley bottom, lies Holocene alluvium. The Holocene alluvium that has accumulated in the valley bottoms consists of clay, silt, sand, and gravel and in the lowest portions of terrace deposits by streams. The Regina Member of the San Jose Formation is described as clay, shale, siltstone, mudstone, shaley sandstone, and sandy shale. The depositional environments of the Regina Member consist of floodplains and stream channel deposits derived mostly from the uplift of the Nacimiento. The Cuba Mesa Member of the San Jose Formation consists of conglomeritic sandstone with intermixed pebbles and cobbles of quartzite and granite derived from the highlands to the north in the San Juan and La Plata mountain ranges. The Regina and Cuba Mesa Members make up the lower portion of the San Jose formation and intertongue throughout its deposition (Mytton, 1983).

The fluvial sandstones within these geologic units in many cases host seasonal shallow aquifers. In many of the aquifers within the San Jose formation, the Regina Member generally serves as the confining layer, and the Cuba Mesa Members serves as the host rock for the aquifer. The intertonging of these formations make many of the aquifers discontinuous and difficult to understand the hydraulic connectivity. Although a limited number of studies have been completed on the quality of water from the San Jose Formation and similar shallow alluvial aquifers, Stone and others (1983) reports transmissivity values ranging from 40 to 120 square feet per day (ft2/d) and the vertical hydraulic conductivity to be approximately 1.7 ft/d (Brown, 1976) in the San Jose Formation.

It is well known that groundwater close to Largo Canyon Wash is shallow, as the Quaternary alluvial deposits form shallow aquifers when intermixed with fine grained confining layers. The Site is approximately 300 feet west of the Largo Canyon Wash and approximately 2 feet higher in elevation than the center of the wash. Largo Canyon Wash is a seasonal wash that only flows after significant melting events of snowpack and occasionally throughout the year during heavy rainfall events. Multiple first order tributaries to Largo Canyon Wash are located within one mile of the Site including Julian Canyon Wash, Forbes Canyon Wash, and other smaller unnamed first order tributaries to Largo Canyon Wash. Aquifers in the San Jose Formation in the area are generally used for livestock and domestic water supplies.

#### 1.2 LOCAL GEOLOGY AND HYDROLOGY

Geology at the Site consists mainly of sands, silts, and clays eroded and deposited from the Regina and Cuba Mesa Members of the San Jose Formation. The occurrence of organic rich clays and distribution of courser grained lithologies at the Site suggest that the soils are often reworked and re-deposited by seasonal stream and sediment flow. Borelogs are included as Appendix A.

Lithologic observations from sediment collected in boreholes at the Site indicate groundwater is present between approximately 3 to 4 feet below ground surface (bgs). Generally, groundwater at the Site flows to the northeast towards Largo Canyon Wash but is likely subject to minor inflections depending on the time of year and the volume of water in Largo Canyon Wash. Shallow groundwater at the Site and the proximity to Largo Canyon Wash suggest

that the groundwater at the Site and nearby surface waters in Largo Canyon Wash are intrinsically related and contain similar chemical and hydraulic properties.

#### 1.3 LAND AND WATER USE

Land use surrounding the Site consists of natural gas development and livestock grazing areas. The nearest residence is located approximately 4.4 miles northwest of the Site. The closest water well to the Site (permit number SJ-00207) is located at the Dogie Compression Station approximately 1,800 feet to the northwest of the Site (Figure 2). No data is listed for depth to groundwater on the New Mexico Office of the State Engineer (NMOSE) database but notes on the drilling log indicate that the water source is shallow. The closest surface water to the Site is Largo Canyon Wash (300 feet east) (Figure 2). The Forbes Spring is located approximately 3,100 feet southeast of the Site. No other residences or wells are located within one mile of the Site (Figure 2).

#### 1.4 INITIAL RESPONSE

On March 12, 2019, an unknown volume of produced water and natural gas condensate and approximately 658 MCF of natural gas were released from the Lateral H-21 pipeline 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 NMOCD on March 13, 2019 and assigned incident number NCS1907233330. WSP characterized the Site according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of NMAC. Due to the Site having a depth to groundwater of less than 50 feet, the following NMOCD Table 1 closure criteria for soils apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

#### 1.5 INITIAL REMEDIATION ACTIVITIES

Harvest excavated and disposed of approximately 3,200 cubic yards of impacted soil at the Envirotech Landfarm in Bloomfield, New Mexico. The excavation extent is illustrated on Figure 3. A NMOCD representative witnessed collection of eight confirmation soil samples from the excavation sidewalls on March 29, 2019, and April 5, 2019. Laboratory analytical results indicated that the concentrations of BTEX, TPH, and chloride in soil on the sidewalls of the excavation were below the NMOCD Table 1 closure criteria. Soil analytical results are summarized in Table 1, presented on Figure 3, and the laboratory analytical reports are included as Appendix B. While excavating, groundwater was encountered at approximately four feet 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.

#### 2 GROUNDWATER SITE INVESTIGATION

### 2.1 OPEN EXCAVATION FLUID RECOVERY AND WATER SAMPLES

During the excavation and after a portion of the excavation was backfilled, Harvest pumped water from the excavation and collected it in a tank onsite to remediate benzene impacts by groundwater recovery. Between early 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, 2019, and June 6, 2019, to evaluate the quality of groundwater. All five samples exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard for benzene, with concentrations ranging from 310 micrograms per liter ( $\mu$ g/L) on April 3, 2019, to 31  $\mu$ g/L on April 22, 2019. Results from these sampling events are summarized in Table 2 and the laboratory analytical reports are included as Appendix B. Although benzene concentrations generally decreased during groundwater recovery, the decline in concentrations was not significant or stable enough to achieve closure at the Site.

#### 2.2 TEMPORARY MONITORING WELL INSTALLATION

Due to the benzene concentration still exceeding the NMWQCC standards after pumping water from the excavation, WSP returned to the Site in July 2019 and April 2021, to delineate impacts to groundwater. A total of ten boreholes were advanced using a hand auger ranging from 5 feet to 8 feet bgs. Soil borings were advanced within the excavation extent, in each cardinal direction outside of the known excavation extent, and laterally to the southeast and northeast to delineate impacts to groundwater. The soil borings were logged by a WSP geologist who inspected the soil for the presence or absence of petroleum hydrocarbon odor and/or staining. The soil was characterized by visually inspecting the soil samples and field screening the soil headspace using a photo-ionization detector (PID) to monitor for the presence of volatile organic vapors. The highest PID readings were near the surface, likely residual from excavation and backfilling activities. Additionally, high moisture content of the soil may have influenced the PID values. The highest headspace screening result was at the surface of TMW04 at 209.1 parts per million (ppm). The WSP geologist logged the depths at which saturated soils were encountered, indicating the depth to groundwater. Once these 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. Borelogs are included as Appendix A.

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. Anulus volume between the prepacked well screen and the borehole were filled with clean, native fill material. The monitoring wells were completed with flushmount well vaults with steel protective plates and were cemented into the ground. Temporary groundwater monitoring well locations are depicted on Figure 3.

#### 2.3 GROUNDWATER SAMPLING

Following well construction, an oil/water interface probe was used to measure depth to water and the total depth of the well. The temporary monitoring wells were then surveyed to obtain elevations above mean sea level for the top of casing. These elevations were used to determine the groundwater elevations and gradients to infer flow direction. Groundwater elevations are summarized in Table 3 and displayed on Figure 3.

Temporary monitoring wells were sampled by purging a minimum of three casing volumes. Groundwater quality parameters including pH, temperature (degrees Celsius), and conductivity (millisiemens per centimeter) were collected. Some temporary monitoring wells bailed dry before three full casing volumes were purged; therefore,

samples were collected just prior to the wells bailing dry. Groundwater samples were collected in June 2019, August 2020, and April 2021.

Groundwater samples were submitted for laboratory analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021. All samples were placed on ice to maintain a temperature of approximately 4 degrees Celsius (°C) and sealed in a cooler for delivery to Hall Environmental Analysis Laboratory (Hall), of Albuquerque, New Mexico, for analysis. Samples were labeled with the date and time of collection, sample name, sampler's name, and parameters to be analyzed. Strict chain-of-custody procedures were documented including the date and time sampled, sample number, type of sample, sampler's name and signature, preservative used, and analyses required.

#### 2.4 RESULTS

Laboratory analytical results during the June 2019 groundwater sampling event indicated that the benzene concentration in TMW02 exceeded the NMWQCC standard with a concentration of 49 µg/L. Additional temporary monitoring wells TMW06 through TMW08 were installed to delineate the benzene impacts observed in TMW02. The subsequent delineation activities in June 2019 indicated laboratory analytical results for groundwater samples collected from temporary monitoring well TMW08 indicated a concentration of 2.2 µg/L benzene which is compliant with the NMWQCC standard. All other samples from the temporary monitoring wells were below laboratory reporting limits.

The June 2019 groundwater sampling events were submitted to the NMOCD in a Stage 1 Abatement Plan on July 31, 2019. However, no response was received from the NMOCD to approve or acknowledge the Stage 1 Abatement Plan within 60 days of submittal per NMAC 19.15.30.16. The Stage 1 Abatement Plan was resubmitted to the NMOCD on November 13, 2019 and January 29, 2020. No communication was received from the NMOCD.

A subsequent groundwater sampling event in August 2020 was conducted to monitor groundwater impact concentrations and determine if impacts were migrating. Laboratory analytical results during the August 2020 groundwater sampling event indicated benzene concentrations in TMW02 and TMW03 exceeded the NMWQCC standard with concentrations of 8.5  $\mu$ g/L and 16  $\mu$ g/L, respectively. Temporary monitoring well TMW01 exhibited a benzene concentration of 3.3  $\mu$ g/L and ethylbenzene concentration of 6.0  $\mu$ g/L, both of which are compliant with NMWQCC standards. All other samples during the August 2020 sampling event were below laboratory reporting limits. The impacts to groundwater were delineated in the downgradient direction towards the nearest watercourse, Largo Canyon Wash, and the exceeding concentrations were within range of the previous NMWQCC exceedance in TMW01. Based on these findings, additional groundwater events were postponed until a response from the NMOCD was received.

Harvest reassessed the Site during the first quarter of 2021 and opted to conduct another monitoring event and proceed with additional delineation even though NMOCD had not commented on the Stage 1 Abatement Plan. In April 2021, temporary monitoring wells TMW09 and TMW10 were installed to delineate impacts to groundwater downgradient and cross-gradient of TMW03.

The laboratory analytical results during the April 2021 groundwater event indicated that all samples were below laboratory reporting limits and in compliance with NMWQCC standards. The groundwater analytical results as compared to the NMWQCC standards are presented on Figure 4 and summarized in Table 2. The laboratory analytical reports are included as Appendix B.

Depth to groundwater during the April 2021 sampling event ranged from 3.39 feet below top of casing (btoc) (TMW08) to 6.42 feet btoc (TMW09). Based on topography, initial groundwater elevation data, and regional groundwater trends, the generalized groundwater flow direction is likely to the northeast with an overall change in elevation of 0.86 feet from the most upgradient well (TMW01) to the most downgradient well (TMW06). The total groundwater hydraulic gradient between TMW01 and TMW06 was calculated to be approximately 0.0160 feet per foot for the April 2021 monitoring event. However, initial data suggests groundwater gradient is relatively flat at the Site and is subject to seasonal changes due to the presence or absence of water in Largo Canyon Wash (Figure 3). The disturbed soil from the previous excavation activities may also influence the groundwater gradient at the Site. Groundwater elevations are summarized in Table 3.

#### 2.5 CONCLUSIONS

The amount of soil excavated from the release point and the total volume of fluid pumped from the excavation have remediated the impacts to soil and the majority of the impacts to groundwater. This is evident by no impacted soil being detected during the installation of temporary monitoring wells and the decreasing benzene concentrations over time observed from grab samples collected from the open excavation. Previously observed elevated benzene concentrations in groundwater have since diminished to below NMWQCC standards. Therefore, WSP proposes that continued quarterly groundwater monitoring continues until eight consecutive quarters of compliance with NMWQCC standards is achieved in lieu of submitting a Stage 2 Abatement Plan. As no impacts to groundwater currently exist, a remediation proposal is not necessary. If contaminant concentrations rebound and exceed NMWQCC standards, a remediation alternative may be proposed in a Stage 2 Abatement Plan per NMAC 19.15.30.

#### 2.6 QUALITY ASSURANCE

Sampling and analytical techniques have been identified in the text above and conform with the references identified in Subsection B of 20.6.2.3107 NMAC and with 20.6.4.14 NMAC of the water quality standards for interstate and intrastate surface waters in New Mexico.

#### **3 RECOMMENDATIONS**

#### 3.1 PROPOSED GROUNDWATER MONITORING

WSP proposes quarterly groundwater monitoring at the Site beginning within 60 days of receipt of approval from the NMOCD of this Revised Stage 1 Abatement Plan. Fluid-level measurements will be monitored in all temporary monitoring wells using an oil/water interface probe. Each well will be purged of three well casing volumes or until the well is purged dry. Temporary monitoring wells containing sufficient groundwater will be sampled and submitted for laboratory analysis of BTEX by USEPA 8021.

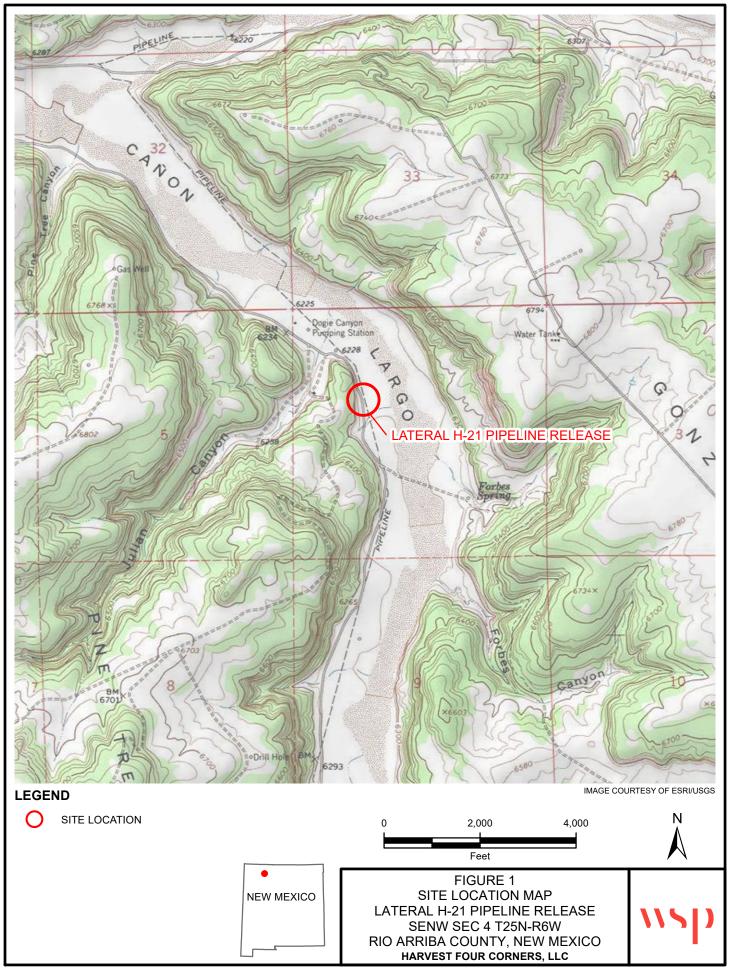
#### 3.2 PROPOSED SCHEDULE

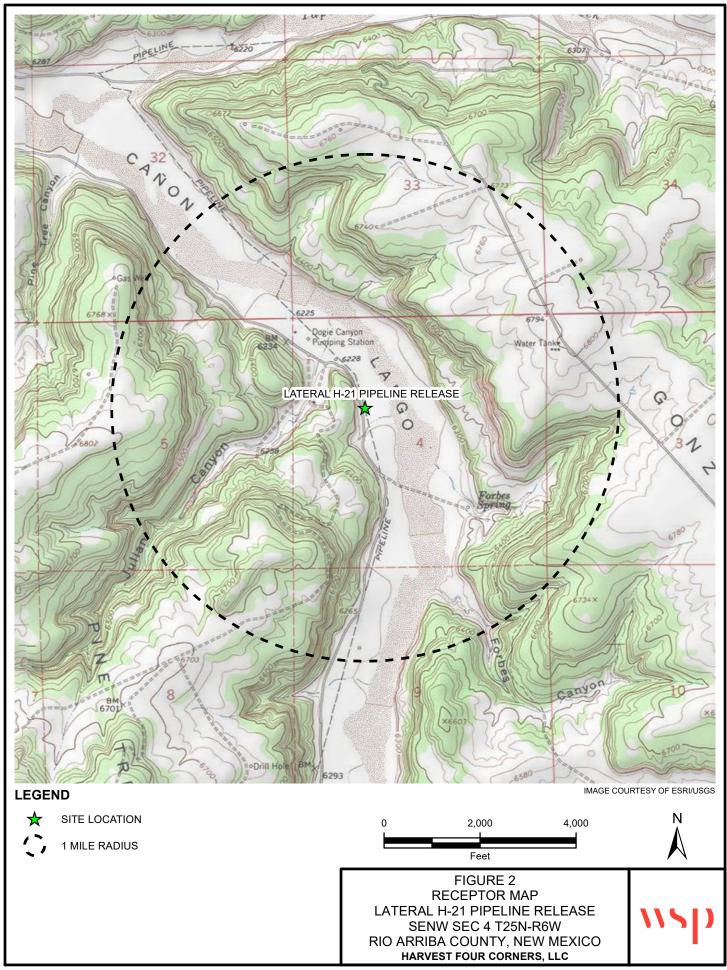
WSP will continue groundwater sampling the Site on a quarterly basis until eight consecutive quarters of compliance with NMWQCC standards is achieved. If impacts to groundwater exceeding NMWQCC standards are observed consistently (subsequent quarterly events with concentrations exceeding NMWQCC standards by 10 percent), a Stage 2 Abatement Plan with remediation options for review from the NMOCD will be submitted.

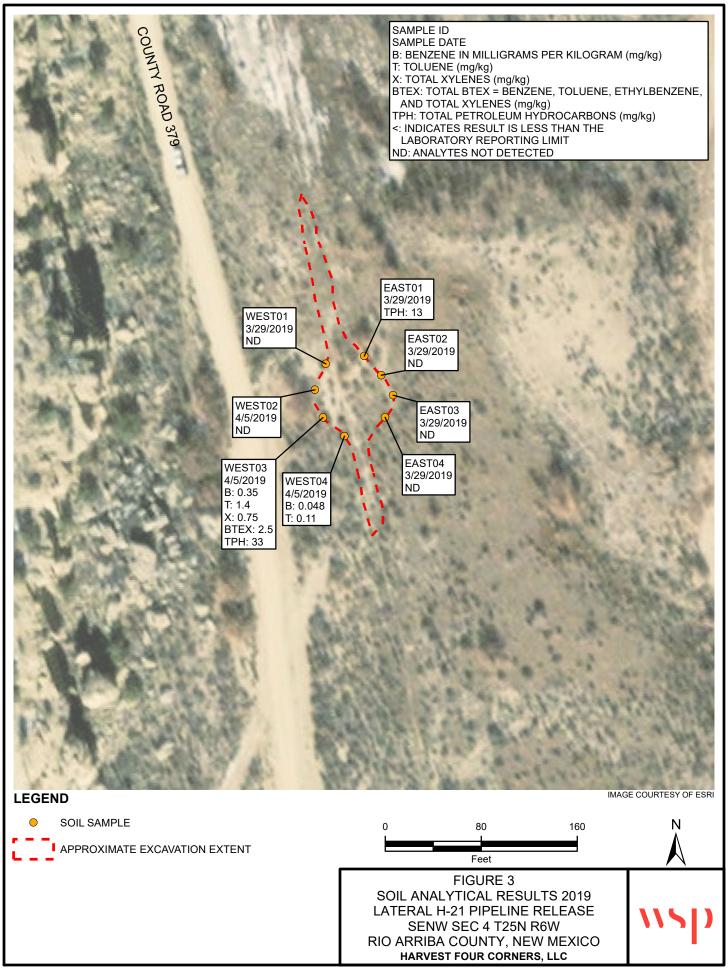
WSP appreciates the opportunity to provide this report to the NMOCD. If you have any questions or comments regarding this Revised Stage 1 Abatement Plan, do not hesitate to contact Danny Burns at (970) 385-1096 or via email at <a href="mailto:danny.burns@WSP.com">danny.burns@WSP.com</a> or Monica Smith at (505)-632-4475 or via email at at <a href="mailto:msmith@harvestmidstream.com">msmith@harvestmidstream.com</a>.

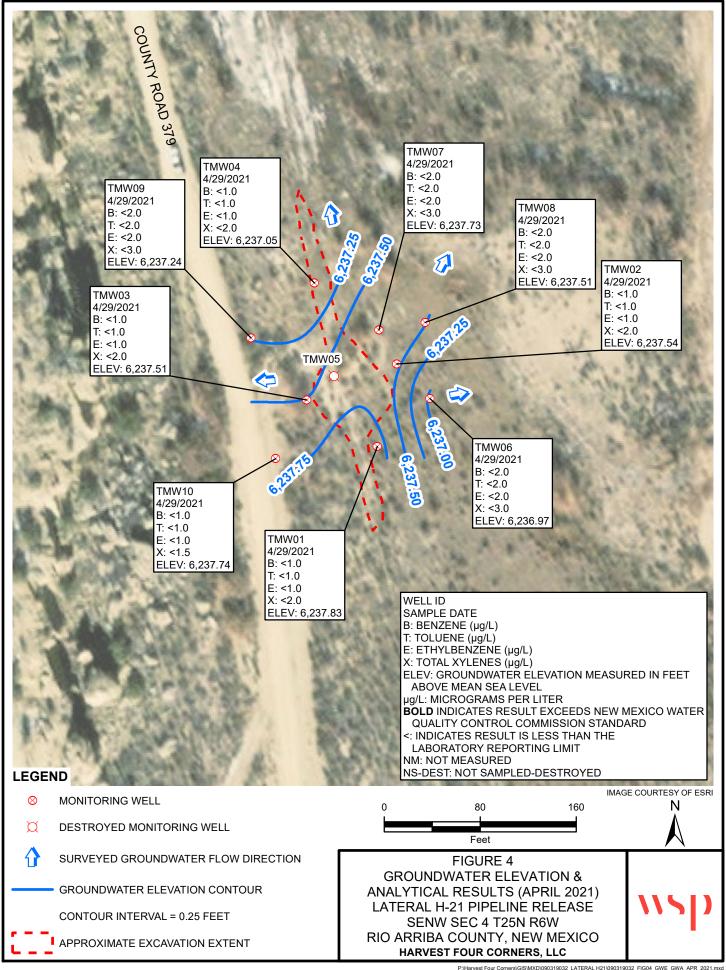
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#### TABLE 1

#### SOIL ANALYTICAL RESULTS LATERAL H-21 PIPELINE RELEASE RIO ARRIBA COUNTY, NEW MEXICO (a)

Sample ID	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
East 01	3/29/2019	< 0.015	< 0.031	< 0.031	< 0.061	< 0.138	<3.1	13	<48	13	<60
East 02	3/29/2019	< 0.015	< 0.029	< 0.029	< 0.059	< 0.132	<2.9	<9.7	<49	<61.6	<61
East 03	3/29/2019	< 0.015	< 0.030	< 0.030	< 0.059	< 0.134	< 3.0	<9.3	<46	< 58.3	<60
East 04	3/29/2019	< 0.016	< 0.031	< 0.031	< 0.062	< 0.140	<3.1	<9.5	<47	<59.6	<60
West 01	3/29/2019	< 0.015	< 0.030	< 0.030	< 0.060	< 0.135	<3.0	<9.3	<46	<58.3	<60
West 02	4/5/2019	< 0.015	< 0.029	< 0.029	< 0.059	< 0.132	<2.9	<8.8	<44	< 55.7	<60
West 03	4/5/2019	0.35	1.4	< 0.17	0.75	2.5	33	<9.4	<47	33	<60
West 04	4/5/2019	0.048	0.11	< 0.033	0.067	0.225	<3.3	<9.9	<49	<62.2	<60
	Remediation 1 Level	10	NE	NE	NE	50	NE	NE	NE	100	600

a/

BTEX - benzene, toluene, ethylbenzene, and total xylenes analyzed by US EPA Method 8021B

 $\ensuremath{\mathsf{DRO}}$  - diesel range organics analyzed by US EPA Method  $8015\ensuremath{\mathsf{D}}$ 

GRO - gasoline range organics analyzed by US EPA Method 8015D

mg/kg - milligrams per kilogram

 $\ensuremath{\mathsf{MRO}}$  - motor oil range organics analyzed by US EPA method 8015D

NE - not established

NMOCD - New Mexico Oil Conservation Division

TPH - total petroleum hydrocarbons (sum of GRO, DRO, and MRO)

< - indicates result is less than the stated laboratory reporting limit

TABLE 2

#### GROUNDWATER ANALYTICAL RESULTS LATERAL H-21 PIPELINE RELEASE RIO ARRIBA COUNTY, NEW MEXICO (a)

Well ID	Sample Date	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (μg/L)	Total Xylenes (μg/L)
	4/3/2019	310	330	8.3	41
Open	4/10/2019	140	89	2.7	20
Excavation	4/22/2019	31	36	< 2.0	5.5
Grab Samples	5/9/2019	220	160	3.8	24
	6/3/2019	39	5.4	<1.0	<1.5
	7/17/2019	<1.0	<1.0	<1.0	<2.0
TMW01	8/7/2020	3.3	<1.0	6.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	< 2.0
	7/17/2019	49	<1.0	<1.0	<2.0
TMW02	8/7/2020	8.5	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
TMWO	7/17/2019	<1.0	<1.0	<1.0	<2.0
TMW03	8/7/2020	16	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
	7/17/2019	<1.0	<1.0	<1.0	< 2.0
TMW04	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<1.0	<1.0	<1.0	<2.0
TD 61110.5	7/17/2019	<1.0	<1.0	<1.0	<2.0
TMW05	8/7/2020	Destroyed	Destroyed	Destroyed	Destroyed
	7/23/2019	<1.0	<1.0	<1.0	<1.5
TMW06	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	< 2.0	< 2.0	< 2.0	< 3.0
	7/23/2019	<1.0	<1.0	<1.0	<1.5
TMW07	8/7/2020	<1.0	<1.0	<1.0	<1.5
	4/29/2021	<2.0	<2.0	<2.0	<3.0
	7/25/2019	2.2	<2.0	<2.0	<4.0
TMW08	8/7/2020	<1.0	<1.0	<1.0	<1.5
11.17,00	4/29/2021	<2.0	<2.0	<2.0	<3.0
TMW09	4/29/2021	<2.0	<2.0	<2.0	<3.0
TMW10	4/29/2021	<1.0	<1.0	<1.0	<1.5
	C Standard	5	1,000	700	620

#### TABLE 2

#### GROUNDWATER ANALYTICAL RESULTS LATERAL H-21 PIPELINE RELEASE RIO ARRIBA COUNTY, NEW MEXICO (a)

Well ID	Sample Date	Benzene (µg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)
---------	-------------	-------------------	-------------------	-----------------------------	----------------------------

a/

NMWQCC- New Mexico Water Quality Control Comission

**Bold** - indicates result exceeds NMWQCC standard

μg/L- micrograms per liter

< - indicates result is below laboratory reporting limit

TABLE 3

#### GROUNDWATER ELEVATION SUMMARY LATERAL H-21 PIPELINE RELEASE RIO ARRIBA COUNTY, NEW MEXICO (a)

Well ID	Sample Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
	7/17/2019		4.11	6,238.01
	7/23/2019		4.12	6,238.00
TMW01	7/25/2019	6,242.12	4.10	6,238.02
	8/7/2020		4.23	6,237.89
	4/29/2021		4.29	6,237.83
	7/17/2019		3.25	6,237.75
	7/23/2019	]	3.26	6,237.74
TMW02	7/25/2019	6,241.00	3.25	6,237.75
	8/7/2020		3.22	6,237.78
	4/29/2021		3.46	6,237.54
	7/17/2019		4.77	6,237.83
	7/23/2019		5.66	6,236.94
TNW03	7/25/2019	6,242.60	4.83	6,237.77
	8/7/2020		5.96	6,236.64
	4/29/2021		5.09	6,237.51
	7/17/2019		4.20	6,237.37
	7/23/2019		5.60	6,235.97
TMW04	7/25/2019	6,241.57	4.28	6,237.29
	8/7/2020	]	4.50	6,237.07
	4/29/2021		4.52	6,237.05
	7/17/2019		4.01	6,237.73
TMW05	7/23/2019	6 241 74	4.02	6,237.72
1 M W 03	7/25/2019	6,241.74	4.02	6,237.72
	8/7/2020		Destroyed	Destroyed
	7/23/2019		3.54	6,237.07
TMMIO	7/25/2019	( 240 (1	3.43	6,237.18
TMW06	8/7/2020	6,240.61	3.64	6,236.97
	4/29/2021		3.64	6,236.97
	7/23/2019		3.55	6,237.87
TM 433/07	7/25/2019	6 241 42	3.45	6,237.97
TMW07	8/7/2020	6,241.42	3.70	6,237.72
	4/29/2021		3.69	6,237.73

TABLE 3

#### GROUNDWATER ELEVATION SUMMARY LATERAL H-21 PIPELINE RELEASE RIO ARRIBA COUNTY, NEW MEXICO (a)

Well ID	Sample Date	Top of Casing Elevation (feet AMSL)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet AMSL)
	7/25/2019		3.25	6,237.65
TMW08	8/7/2020	6,240.90	3.52	6,237.38
	4/29/2021		3.39	6,237.51
TMW09	4/29/2021	6,243.66	6.42	6,237.24
TMW10	4/29/2021	6,243.94	6.20	6,237.74

 $\mathbf{a}$ 

AMSL - above mean sea level

BTOC - below top of casing

# APPENDIX A: BORE LOGS

							_	_						
		\	\ \				Î	4	Advancing Opportunity  848 E. 2nd Ave					
10					N. V.S.			DODE	Durango, Colorado 81301 BORING LOG/MONITORING WELL COMPLETION DIAG					
			1				疆	BORIT Boring/Wei		WELL COMPLETIC	DN DIAGRAM			
	2 .44	100				1			BHOI	Lateral 1	H-21			
							U0E	Date:	7/16/2019	Project Number: 090319	032			
1	44					No.	Spile	Logged By	JA/EC	Drilled By:				
Elevation:			Detector:		DID			Drilling Me	thod:	Sampling Method:				
Gravel Pac	:k:	20.4	10	.1.	PID			Seal:	Hand Auger	Grout:				
Casing Ty	NA pe:	40 - s	10 5	ilica	sand			Diameter:	Sand Length:	Hole Diameter:	Depth to Liquid:			
	dule 40	PVC		Slot:					2"	Hole Diameter:	NA			
	dule 40	PVC			10"			Diameter:	2" Length: 5	Total Depth:	Depth to Water:			
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/R	emarks	Well Completion			
	moist	92.5	No		0			5P-5C	no Stainlodor	sand some silt	Flush mouse			
	maist	33.7	NO		1	-				97				
	10, 20	52.7	10 0						SAA	-				
	moist	27.8	NO		2 -	$H_{c}$					-2013			
	weo	119.4	NO		3 _	GW			K _	-	I TO HE SI			
		Sar			4	-			College of Co	112'6 (1)	4 1/2			
		Sat			5				Suturated san	1151E SAA				
		MC							Saturated Sans	ark brown/black				
					6 _	-					[-			
					7				TD: 5'		<u> </u>			
					8	-								
						]				-				
					9					-				
					10	-				_	-			
					11									
					12									
					13					-				
					I	1				-				
					14	-					-			
					15		Ш							

DESIGNATION OF THE PERSON OF T		District Con-					- 7-								
		1		T			•	L	Advancing Oppor	tunity					
	為			1 man		100	櫨		848 E. 2nd Ave						
				<b>*2</b> 2					Durango, Colorado 81301						
4	12.		14			1		BORI	NG LOG/MONITORING W	ELL COMPLETIC	ON DIAGRAM				
		100		a	10			Boring/Wei	Number:	Project: Lateral 1	H-21				
2.9								Date:	7/16/2019	Project Number:					
4	20	-	198			4 ( )		Logged By		090319 Drilled By:					
Elevation:			Detector:		OW/OCCUPANTA	, I=1	-	Drilling Me	JA/EC thod:	LTF Sampling Method:	3				
Gravel Pac	k:				PID	^		Seal:	Hand Auger	Hand A	uger				
	NA	20-4	0 si	lica	Sanc	<u> </u>			Sand	Grout: NA					
	dule 40	PVC						Diameter:	2" Length:	Hole Diameter:	Depth to Liquid:				
Screen Tyr Sche	e: edule 40	PVC		Slot:	10"			Diameter:	2" Length: 5	Total Depth: 5.51	Depth to Water:				
		$\overline{}$	¿Su				_				3.3				
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth	Sample	Recovery	Soil/Rock Type	Lithology/Ren	narks	Well				
Pene Resi	<u>%</u> °	'apo.	CS	San	(ft. bgs.)	Run	Rec	Soil/ Ty		. A A	Completion				
<del> </del>	1	<del>                                     </del>			0	П			P60	rly graded	flush mount				
	dry	52.0	NO					SP-5C	lightbroun/red s	and w/ -	7 105 11 2201				
	dry	88.1			1	-			SAA	_					
	Moist	23.0			2 ]				SAA	9					
	moist	20.0			3 -	Cu	16	23.5bg	SAA		al ,				
	1				]		~	m		. 0	1, 7/, 1				
	SAT				4 _	+ 1			SAA, Satur	×1601	<b>- - - - - - - - - -</b>				
	SAT				5					34 24	<u> </u>				
					6	-					E				
					_ 1	.]				-					
					7	1			TD # 5.	Γ'					
					8 ]	]			10 4 3	3					
					9	·									
					10	-					F				
					11	.]					T				
					I	.				-					
					12										
					13					2 <del>-</del>					
					14	-				-	-				
					15										

Elevation:			Detector:		PID	outain!	arin	BORIN Boring/Wel Date: Logged By:	84 D IG LOG/MO I Number: 2/40 7/16/2 JA/E	48 E. 21 urango ONITOH 019	RING W	Funity  Fado 81301  ELL COMPLETION  Project:  Lateral  Project Number:  090319  Drilled By:  LTI  Sampling Method:  Hand A	H-21 9032 E
	ΝA	70-	40 5	lica	San	J		Seal:	Sano	7		Grout: WA	
	lule 40	PVC						Diameter:	Le 2"	ength:	7	Hole Diameter:	Depth to Liquid:
Screen Type: Sched	: lule 40	PVC		Slot: 0.0	10"			Diameter:	Le 2"	ngth: 6	)	Total Depth:	Depth to Water:
Penetration Resistance	Moisture Content	Vарог (ррm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type		Litho	logy/Ren	-	Well Completion
n n	noise moise Moise moist		NO NO NO		0   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   15	Gr		SP-SC	Meist, It Some s SAA NA SAA NA SAA NA TD	iste < pre>person person perso	1090 101000 1010001 1010001		Aust mailt

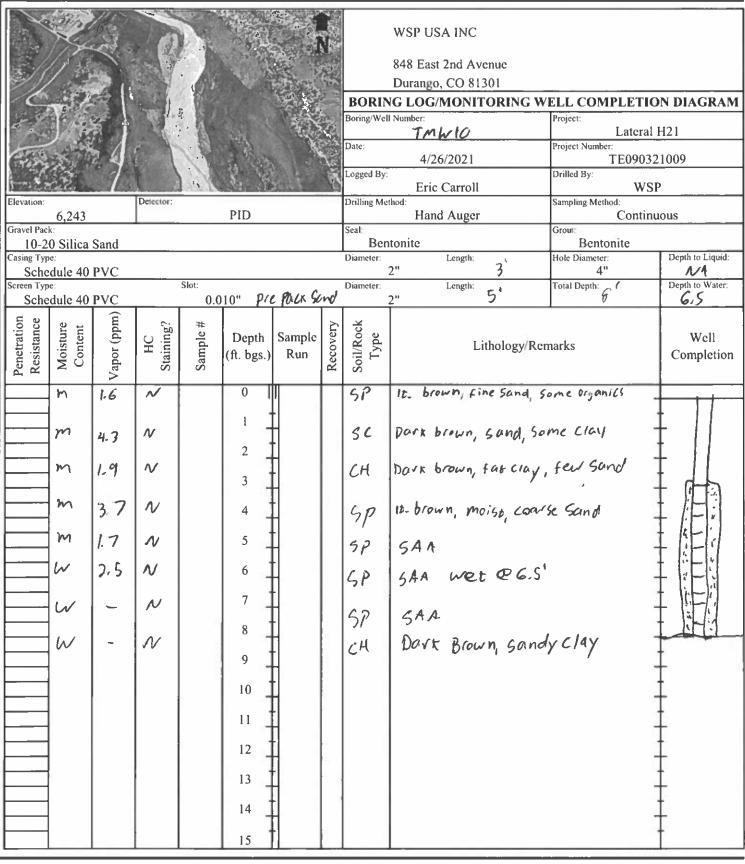
Elevation:	k:	20-	Detector:	Silia	PID ca S	- rd	eoth .	BORIN Boring/Well Date: Logged By: Drilling Met	Advancing Opp  848 E. 2nd Al Durango, Co.  GLOG/MONITORING  Number:  7/16/2019  JA/EC  hod: Hand Auger  \$ and	ve Iorado 81301	H-21 9032 E
	e: dule 40								2" Length: 1-5	Hole Diameter:	Depth to Liquid:
Screen Typ	dule 40	PVC		Slot: 0.0	10"			Diameter:	Length: 5'	Total Depth: 6.5	Depth to Water:
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/F		Well Completion
	Moist moist moist	209,1 7.9 11.7 13.4	NO N		0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15	6w	@ 5	5P-5C	light-brown/reddish Sand w/silt(10) black organic Swampy smell SAA SAA SAA SAA, sai SAA, sai	lurated .	Screen G.Stol3

							_	-						
		$\left\langle \cdot \right\rangle$	1		4	1	TV.		848 E	cing Oppor				
e e									Durango, Colorado 81301					
							8		BORING LOG/MONITORING WELL COMPLETION DIAGRAM  Boring Well Number: Project:					
	19.4	200				\			BH05	•	Project: Latera	1 H-21		
							ð,	Date:	7/16/2019		Project Number: 0903	19032		
*	1	. /				O quality	Sill h	Logged By:	JA/EC		Drilled By:	ΓE		
Elevation:			Detector:		PID			Drilling Me			Sampling Method:	Auger		
Gravel Pac	k;	20.	40	-: :-	$\alpha$ $\beta$ $\alpha$	ind		Seal:		1	Grout:			
Casing Ty	oe:		<u>U</u>	5/110	usa	ricq		Diameter:	Sand Length:	, 1¢	Hole Diameter:	Depth to Liquid:		
Sche Screen Typ	edule 40	PVC		Slot:				Diameter:	2" Length:	6	Total Depth:	Depth to Water:		
	dule 40		-3	0.0	10"				2"	5	5.5	3.5'		
Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	L	ithology/Ren	narks	Well		
Pen Res	ĬŽ Ŭ	Vapo	HC S	Saı	(it. ogs.)	Kun	Rec	Soi				Completion		
	moist	1.3	NP		0	I			moist It Redo	dish brown	a Sand brit	Flush mount		
	moist	0.0	NO		1 _				SOM SITE	NO Stain	10der	13/12		
	M015t	10.8	NO		2 2	-			SAA			131131		
	moise	15.1	NO		3 _	GW			SAR			1375		
	Sut		No		4 -							151751		
					5 _				saturated	duik brow	n Sandy Lley	1313		
					6						1			
					7 _				_	rdes	2.5	<u> </u>		
					8 -							1		
					9 -							-		
					10							‡		
					11							<u> </u>		
					12							<u>†</u>		
					13							<u>†</u>		
					14	-						‡		
					15							†		

						2		L	Advancing Oppor	tunity	
						4			848 E. 2nd Ave		
								74	Durango, Colo	rado 81301	
									NG LOG/MONITORING W	ELL COMPLETION	N DIAGRAM
								Boring/Wel	1 Number: BH - O6	Project: Lateral	14-21
								Date:	7/22/19	Project Number: 090 3	19032
T71			la .					Logged By:	Iravis Short	Drilled By:	
Elevation:			Detector:		PID			Drilling Me	Hand Auger	Sampling Method: Hand Auger	
Gravel Pac	<sub>k:</sub> 0 Silica	Sand	NA	20-40	silica sa	nd		Seal:	sand	Grout: NA	
Casing Typ	edule 40	PVC						Diameter:	2" Length: 6"	Hole Diameter;	Depth to Liquid: NA
Screen Typ				Slot:	10"			Diameter:	Length: 5'	Total Depth: 5.5'	Depth to Water:
			ng?				_				
Penetration Resistance	Moisture Content	r (pr	taini	Sample #	Depth	Sample	Recovery	Soil/Rock Type	Lithology/Rer	narks	Well
Pen( Res	💆 ပိ	Vapor (ppm)	HC Staining?	Sar	(ft. bgs.)	Run	Rec	Soil			Completion
	moist		NO		0	II -		58-50	Dark redish brown	sand -	Frish main
		3,4	NO		1 _				Some Silt, NOSA	rain lodor	PER
	woist	3.0	00		2 -						1. 1.
	5a+.	Sat.	NO		3 .						F.E. Line
	5at.	5W+.	NO		4 -	- GW			saturaled sons/	int.	
	Sort	sat.	C N		5	-			- some giver who some some given the	1	
	500	Sut.	No						1	7	
					6 -	1					-
					7 –	H				3_	
					8				To=5.5	-	<u> </u>
					9					-	
					10						_
					11	-					
					12						
					13	]				-	-
					14	1				-	-
						.				-	=) -
					15	$\perp$					

Elevation: Gravel Pac H0-2 Casing Typ	ek: 20 Silica	Sand	Detector:	20-	PID 40 silica		N	Advancing Opportunity  848 E. 2nd Ave Durango, Colorado 81301  BORING LOG/MONITORING WELL COMPLETION DIAGRA Boring/Well Number:  Project: Lateral H-21  Date: Project Number: O903 1903  Logged By: Drilled By: LTC  Drilling Method: Hand Auge Sampling Method: Hand Auge Seal: Sand  Diameter: Length: Hole Diameter: Depth to Liqui					
Screen Typ			Slot: 0.010"				_	2" 1' 2" Diameter: Length: Total Depth:			Depth to Water:		
Penetration Resistance	Moisture Content Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Rei	marks	Well Completion		
	moist moist moist soit soit soit	,	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		0   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15   15   15   15   15   15   15	<i>S S S S S S S S S S</i>			Dark redish brow Some silt, No Saturated Sand/Si Some grey con Saturated CI	It wring	flush mount		

Elevation:  Gravel Pack:  10-20 Siliea Sand  Casing Type:  Schedule 40 PVC	PID	10	BORII Boring/We Date: T Logged By Drilling Mo Seal:	15H08 -25-19 5A	Project: Project Number: Project Number: On 3 190 Drilled By: Sampling Method Grout: Hole Diameter:	-21
Screen Type: Schedule 40 PVC	Slot: 0.010"		Diameter:	2" Length: 5 '	Total Depth:	Depth to Water:
Penetration Resistance Moisture Content Vapor (ppm)	# Depth (ft. bgs.)	Sample Run	Soil/Rock Type		marks	Well Completion
M (8.0 N) M 3.5 N SAT SAT		Eu	23	brown sand w/ w/ intermix organiz rid SAA, NO (6 SAA	· -	



# APPENDIX B: LABORATORY ANALYTICAL REPORTS



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

April 02, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475 FAX

\_ \_

RE: Lateral H 21 OrderNo.: 1903E75

#### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 6 sample(s) on 3/30/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

anded

4901 Hawkins NE

Albuquerque, NM 87109

**CLIENT:** Harvest

#### **Analytical Report**

Lab Order **1903E75**Date Reported: **4/2/2019** 

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: East 01

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 12:40:00 PM

 Lab ID:
 1903E75-001
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	60	mg/Kg	20	4/1/2019 11:49:13 AM	43997
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	3/31/2019 3:45:39 PM	R58787
Surr: BFB	109	70-130	%Rec	1	3/31/2019 3:45:39 PM	R58787
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	13	9.6	mg/Kg	1	4/1/2019 8:39:31 AM	43986
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2019 8:39:31 AM	43986
Surr: DNOP	98.1	70-130	%Rec	1	4/1/2019 8:39:31 AM	43986
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: RAA
Benzene	ND	0.015	mg/Kg	1	3/31/2019 3:45:39 PM	S58787
Toluene	ND	0.031	mg/Kg	1	3/31/2019 3:45:39 PM	S58787
Ethylbenzene	ND	0.031	mg/Kg	1	3/31/2019 3:45:39 PM	S58787
Xylenes, Total	ND	0.061	mg/Kg	1	3/31/2019 3:45:39 PM	S58787
Surr: 1,2-Dichloroethane-d4	85.8	70-130	%Rec	1	3/31/2019 3:45:39 PM	S58787
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	3/31/2019 3:45:39 PM	S58787
Surr: Dibromofluoromethane	90.0	70-130	%Rec	1	3/31/2019 3:45:39 PM	S58787
Surr: Toluene-d8	88.9	70-130	%Rec	1	3/31/2019 3:45:39 PM	S58787

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 1 of 11

#### **Analytical Report**

Lab Order **1903E75**Date Reported: **4/2/2019** 

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: East 02

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 12:50:00 PM

 Lab ID:
 1903E75-002
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: smb
Chloride	ND	61	mg/Kg	20	4/1/2019 12:01:38 PM	43997
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	3/31/2019 4:14:12 PM	R58787
Surr: BFB	106	70-130	%Rec	1	3/31/2019 4:14:12 PM	R58787
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	: CLP
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2019 9:03:02 AM	43986
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2019 9:03:02 AM	43986
Surr: DNOP	99.5	70-130	%Rec	1	4/1/2019 9:03:02 AM	43986
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: RAA
Benzene	ND	0.015	mg/Kg	1	3/31/2019 4:14:12 PM	S58787
Toluene	ND	0.029	mg/Kg	1	3/31/2019 4:14:12 PM	S58787
Ethylbenzene	ND	0.029	mg/Kg	1	3/31/2019 4:14:12 PM	S58787
Xylenes, Total	ND	0.059	mg/Kg	1	3/31/2019 4:14:12 PM	S58787
Surr: 1,2-Dichloroethane-d4	83.9	70-130	%Rec	1	3/31/2019 4:14:12 PM	S58787
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	3/31/2019 4:14:12 PM	S58787
Surr: Dibromofluoromethane	89.9	70-130	%Rec	1	3/31/2019 4:14:12 PM	S58787
Surr: Toluene-d8	87.3	70-130	%Rec	1	3/31/2019 4:14:12 PM	S58787

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 2 of 11

**CLIENT:** Harvest

### **Analytical Report**

Lab Order **1903E75**Date Reported: **4/2/2019** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: East 03

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 1:00:00 PM

 Lab ID:
 1903E75-003
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: smb
Chloride	ND	60	mg/Kg	20	4/1/2019 12:14:03 PM	43997
EPA METHOD 8015D MOD: GASOLINE RANGE	<u> </u>				Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	3/31/2019 4:42:45 PM	R58787
Surr: BFB	107	70-130	%Rec	1	3/31/2019 4:42:45 PM	R58787
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/1/2019 9:26:52 AM	43986
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2019 9:26:52 AM	43986
Surr: DNOP	95.0	70-130	%Rec	1	4/1/2019 9:26:52 AM	43986
EPA METHOD 8260B: VOLATILES SHORT LIST	Г				Analyst	: RAA
Benzene	ND	0.015	mg/Kg	1	3/31/2019 4:42:45 PM	S58787
Toluene	ND	0.030	mg/Kg	1	3/31/2019 4:42:45 PM	S58787
Ethylbenzene	ND	0.030	mg/Kg	1	3/31/2019 4:42:45 PM	S58787
Xylenes, Total	ND	0.059	mg/Kg	1	3/31/2019 4:42:45 PM	S58787
Surr: 1,2-Dichloroethane-d4	90.1	70-130	%Rec	1	3/31/2019 4:42:45 PM	S58787
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	3/31/2019 4:42:45 PM	S58787
Surr: Dibromofluoromethane	91.6	70-130	%Rec	1	3/31/2019 4:42:45 PM	S58787
Surr: Toluene-d8	88.9	70-130	%Rec	1	3/31/2019 4:42:45 PM	S58787

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 3 of 11

### **Analytical Report**

Lab Order **1903E75**Date Reported: **4/2/2019** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: East 04

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 1:15:00 PM

 Lab ID:
 1903E75-004
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: smb
Chloride	ND	60	mg/Kg	20	4/1/2019 12:51:17 PM	43997
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	3/31/2019 5:11:16 PM	R58787
Surr: BFB	109	70-130	%Rec	1	3/31/2019 5:11:16 PM	R58787
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/1/2019 9:50:42 AM	43986
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2019 9:50:42 AM	43986
Surr: DNOP	96.2	70-130	%Rec	1	4/1/2019 9:50:42 AM	43986
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: RAA
Benzene	ND	0.016	mg/Kg	1	3/31/2019 5:11:16 PM	S58787
Toluene	ND	0.031	mg/Kg	1	3/31/2019 5:11:16 PM	S58787
Ethylbenzene	ND	0.031	mg/Kg	1	3/31/2019 5:11:16 PM	S58787
Xylenes, Total	ND	0.062	mg/Kg	1	3/31/2019 5:11:16 PM	S58787
Surr: 1,2-Dichloroethane-d4	85.5	70-130	%Rec	1	3/31/2019 5:11:16 PM	S58787
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	3/31/2019 5:11:16 PM	S58787
Surr: Dibromofluoromethane	87.7	70-130	%Rec	1	3/31/2019 5:11:16 PM	S58787
Surr: Toluene-d8	90.0	70-130	%Rec	1	3/31/2019 5:11:16 PM	S58787

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 4 of 11

**CLIENT:** Harvest

### **Analytical Report**

Lab Order **1903E75**Date Reported: **4/2/2019** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: West 01

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 1:25:00 PM

 Lab ID:
 1903E75-005
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	smb
Chloride	ND	60	mg/Kg	20	4/1/2019 1:03:41 PM	43997
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	: RAA
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	3/31/2019 5:39:44 PM	R58787
Surr: BFB	109	70-130	%Rec	1	3/31/2019 5:39:44 PM	R58787
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	CLP
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/1/2019 10:14:23 AM	43986
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2019 10:14:23 AM	43986
Surr: DNOP	97.6	70-130	%Rec	1	4/1/2019 10:14:23 AM	43986
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst	: RAA
Benzene	ND	0.015	mg/Kg	1	3/31/2019 5:39:44 PM	S58787
Toluene	ND	0.030	mg/Kg	1	3/31/2019 5:39:44 PM	S58787
Ethylbenzene	ND	0.030	mg/Kg	1	3/31/2019 5:39:44 PM	S58787
Xylenes, Total	ND	0.060	mg/Kg	1	3/31/2019 5:39:44 PM	S58787
Surr: 1,2-Dichloroethane-d4	86.8	70-130	%Rec	1	3/31/2019 5:39:44 PM	S58787
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	3/31/2019 5:39:44 PM	S58787
Surr: Dibromofluoromethane	90.1	70-130	%Rec	1	3/31/2019 5:39:44 PM	S58787
Surr: Toluene-d8	88.8	70-130	%Rec	1	3/31/2019 5:39:44 PM	S58787

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 5 of 11

**CLIENT:** Harvest

Analytical Report
Lab Order 1903E75

Date Reported: 4/2/2019

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: Background

 Project:
 Lateral H 21
 Collection Date: 3/29/2019 1:40:00 PM

 Lab ID:
 1903E75-006
 Matrix: SOIL
 Received Date: 3/30/2019 9:20:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch

 EPA METHOD 300.0: ANIONS
 Analyst: smb

 Chloride
 ND
 60
 mg/Kg
 20
 4/1/2019 1:16:06 PM
 43997

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 6 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903E75** 

02-Apr-19

Client: Harvest
Project: Lateral H 21

Sample ID: MB-43997 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **43997** RunNo: **58782** 

Prep Date: 4/1/2019 Analysis Date: 4/1/2019 SeqNo: 1976552 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-43997 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 43997 RunNo: 58782

Prep Date: 4/1/2019 Analysis Date: 4/1/2019 SeqNo: 1976553 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.5 90 110

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 7 of 11

### Hall Environmental Analysis Laboratory, Inc.

5.7

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WO#: **1903E75** 

02-Apr-19

Client: Harvest
Project: Lateral H 21

Surr: DNOP

Surr: DNOP

Sample ID: LCS-43986 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 43986 RunNo: 58785 Prep Date: 3/30/2019 Analysis Date: 4/1/2019 SeqNo: 1975449 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Result Diesel Range Organics (DRO) 10 0 54 50.00 108 63.9 124

115

115

70

130

130

5.000

10.00

Sample ID: MB-43986 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK Client ID: PBS Batch ID: 43986 RunNo: 58785 Prep Date: 3/30/2019 Analysis Date: 4/1/2019 SeqNo: 1975450 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 8 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903E75** 

02-Apr-19

Client: Harvest
Project: Lateral H 21

Sample ID: 100ng sl lcs Client ID: LCSS	Batcl	Type: LC	8787	F	tCode: <b>El</b> RunNo: <b>5</b>	List				
Prep Date:	Analysis D	Date: 3/	31/2019	5	SeqNo: 19	975465	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	82.7	70	130			
Toluene	0.95	0.050	1.000	0	94.6	70	130			
Ethylbenzene	0.93	0.050	1.000	0	92.6	70	130			
Xylenes, Total	2.8	0.10	3.000	0	93.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.5	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.42		0.5000		84.9	70	130			
Surr: Toluene-d8	0.45		0.5000		89.8	70	130			

Sample ID: 1903E75-002AMS	Samp	Гуре: МS	3	Tes						
Client ID: East 02	Batc	h ID: <b>S5</b>	8787	F	RunNo: <b>5</b>					
Prep Date:	Analysis [	Date: <b>3/</b> 5	31/2019	S	SeqNo: 1	975490	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.52	0.015	0.5889	0	87.8	68.9	131			
Toluene	0.55	0.029	0.5889	0	94.1	64.3	137			
Ethylbenzene	0.55	0.029	0.5889	0	93.8	70	130			
Xylenes, Total	1.7	0.059	1.767	0	94.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.25		0.2944		86.6	70	130			
Surr: 4-Bromofluorobenzene	0.30		0.2944		102	70	130			
Surr: Dibromofluoromethane	0.26		0.2944		87.1	70	130			
Surr: Toluene-d8	0.25		0.2944		85.9	70	130			

Sample ID: 1903E75-002AMS	SD Samp1	уре: МS	SD	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: East 02	Batc	n ID: <b>S5</b>	8787	F	RunNo: <b>5</b>	8787				
Prep Date:	Analysis D	Date: 3/	31/2019	\$	SeqNo: 1	975491	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.51	0.015	0.5889	0	87.0	68.9	131	0.832	20	
Toluene	0.55	0.029	0.5889	0	93.2	64.3	137	0.965	20	
Ethylbenzene	0.55	0.029	0.5889	0	92.8	70	130	1.00	0	
Xylenes, Total	1.7	0.059	1.767	0	94.1	70	130	0.769	0	
Surr: 1,2-Dichloroethane-d4	0.25		0.2944		86.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.31		0.2944		104	70	130	0	0	
Surr: Dibromofluoromethane	0.27		0.2944		93.0	70	130	0	0	
Surr: Toluene-d8	0.26		0.2944		87.5	70	130	0	0	

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 9 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903E75** 

02-Apr-19

Client: Harvest
Project: Lateral H 21

Sample ID: rb Client ID: PBS	Batc	Гуре: <b>МЕ</b> h ID: <b>S5</b>	8787	F	RunNo: <b>5</b>	8787	8260B: Volat		List	
Prep Date:	Analysis [	Date: <b>3/</b>	31/2019	\$	SeqNo: 1	975498	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.8	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.43		0.5000		85.5	70	130			
Surr: Toluene-d8	0.46		0.5000		91.2	70	130			

### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 10 of 11

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1903E75** 

02-Apr-19

Client: Harvest
Project: Lateral H 21

Sample ID: 1903E75-001AMS SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: East 01 Batch ID: **R58787** RunNo: 58787 Prep Date: Analysis Date: 3/31/2019 SeqNo: 1975533 Units: mq/Kq PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Gasoline Range Organics (GRO) 13 3.1 15.29 Λ 83.7 68.2 135 Surr: BFB 330 305.8 107 130

Sample ID: 1903E75-001AMSD TestCode: EPA Method 8015D Mod: Gasoline Range SampType: MSD Client ID: East 01 Batch ID: **R58787** RunNo: 58787 Prep Date: Analysis Date: 3/31/2019 SeqNo: 1975534 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 12 15.29 O 81.4 68.2 135 2.76 20 Surr: BFB 320 305.8 106 70 130 0 0

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: **R58787** RunNo: 58787 Prep Date: Analysis Date: 3/31/2019 SeqNo: 1975539 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte LowLimit Qual Gasoline Range Organics (GRO) 22 5.0 25.00 0 89.2 70 130 Surr: BFB 510 500.0 102 70 130

Sample ID: rb TestCode: EPA Method 8015D Mod: Gasoline Range SampType: MBLK Client ID: PBS Batch ID: **R58787** RunNo: 58787 Prep Date: Analysis Date: 3/31/2019 SeqNo: 1975542 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 540 500.0 107 70 130

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 11 of 11



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 Numb	er: 1903E75		RcptNo:	1
Received By: Anne Thorne	3/30/2019 9:20:00 A	λM	Anne Am	<b>~</b>	
Completed By: Anne Thorne	3/30/2019 9:56:09 A	М	Anne St.		
Reviewed By: M 3 30 4			Cana Jim		
10000	in dec				
Chain of Custody	3017				
1. Is Chain of Custody complete?		Yes 🗸	No 🗀 ·	Not Present	
2. How was the sample delivered?		<u>Courier</u>			
Log In	_	[7]	$\Box$		
<ol><li>Was an attempt made to cool the sample</li></ol>	5?	Yes 🗹	No 🗀	NA 🗌	
Were all samples received at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗆	NA 🗀	
<b>5 0 1</b> ( ) .		🗖	$\Box$	•	
<ol><li>Sample(s) in proper container(s)?</li></ol>		Yes 🗹	No ∐		
6. Sufficient sample volume for indicated tes	t(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) prop		Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA $\square$	
O MOA viala hava mara havalara a o		<b>v</b> [7]	N- 🗆	No VOA Visto 🗷	
9. VOA vials have zero headspace?  10. Word any sample sorteless received have	l2	Yes □ <sub>Yes</sub> □	No ∟ No ☑ 『	No VOA Vials 🗹	
0, Were any sample containers received bro	ken?	Yes □	NO 🛂	# of preserved	
1.Does paperwork match bottle labels?		Yes 🗹	No 🗆	bottles checked for pH:	
(Note discrepancies on chain of custody)			_		>12 unless noted)
2. Are matrices correctly identified on Chain	of Custody?	Yes 🗹	No 🗔	Adjusted?	
3. Is it clear what analyses were requested?		Yes 🔽	No 🗔	Checked by:	
4. Were all holding times able to be met?  (If no, notify customer for authorization.)		Yes 🗹	No □ [	Checked by:	
pecial Handling (if applicable)					
15. Was client notified of all discrepancies wit	h this order?	Yes	No 🗆	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail P	hone  Fax	☐ In Person	
Regarding:	V 162.		none rax		
Client Instructions:					
16. Additional remarks:					
7. Cooler Information					
property of a first three than the first control of the control of	Seal Intact   Seal No	Seal Date	Signed By		
3 1.0 Good Y	es	over the control of t			

Received b	y 00	C <b>D:</b> 6	/28/.	2021	11:	44:06 A	W N	o Y)	Air Bubbles										P	ige 47 of	12
HALL ENVIRONMENTAL	environment	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis	(†C	O / WII	(1.81) (1.40) (1.40) (20) (20) (1.40) (1.80)	(GF) (GF) (GF) (GF)	BTEX + MTI TPH 8015B TPH (Metho PPH's (8310 RCRA 8 Me ROR1 Pestici 8260B (VOA 8250 (Semi-	X ×	X	<i>X</i>	X	X	X						ed laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
		7							BTEX + MTI	X	×	<b>×</b>	,X,	×			-		Remarks		possibility
8621 / 8015 On4		-21				6	K;//;or I No	10 Seul	HEAL NO.	102	702	502	209	715	2000				) Date Time	) 03/20/19 0120	ries. This serves as notice of this
Turn-Around Time: 862 (h. 167, d. X. Standard Aresh 4-	Project Name:	DR Leterial H	Project #:		Project Manager:	Kidun HOR	Sampler: M o rg a w	Tempera	R03/74 (1) Container Type and # Type	29h-1	1-402	2011-1	20h-1	1-405	1-402			•	Received by:	Rêceived by:	intracted to other accredited laborato
Chain-of-Custody Record		ARROYO	Nn 874/3	7	west midstern. Ox	□ Level 4 (Full Validation)			Sample Request ID	East 01	Eust od	Fast 03	East of	West 01	BrcKground	)			X Lellion	not back	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredit
n-of-Cus		SS: 1755	171017	505-632	: Kho Ng@		□ Other		e Matrix	1/05/0	5611	) 50; [		150,1	28.1				Relinquished by:	Relinquished by	ıry, samples submi
Chain-of-Client: Have Cst	4	Mailing Address:	\$ 100 m	Phone #: 5	il or Fax#	QA/QC Package: □ Standard	Accreditation	EDD (Type)	te Time	i   12,40		09:11 61	51:11 61	9 1:25	04:1 4		_		Time: <b>3</b> 5/5/5/5	<u> </u>	
Released to	T Ime	Waiing	: 1/.	Joya 3/20	еша 22 4:	O/AO □ 26:23	Accr		Date	3/12/14	3/21/19	3/29/1	3/29/1	3/29/19	3/39/9				Juff/8	She!	



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

April 09, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX:

RE: Lateral H-21 OrderNo.: 1904417

#### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/6/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 1904417

Date Reported: 4/9/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: West-02

 Project:
 Lateral H-21
 Collection Date: 4/5/2019 10:40:00 AM

 Lab ID:
 1904417-001
 Matrix: MEOH (SOIL)
 Received Date: 4/6/2019 10:45:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses EPA METHOD 300.0: ANIONS** Analyst: smb Chloride ND 60 mg/Kg 20 4/8/2019 11:22:28 AM 44191 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: Irm Diesel Range Organics (DRO) ND 8.8 mg/Kg 4/8/2019 10:43:34 AM ND Motor Oil Range Organics (MRO) mg/Kg 1 4/8/2019 10:43:34 AM 44189 44 Surr: DNOP 99.3 44189 70-130 %Rec 4/8/2019 10:43:34 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/8/2019 10:12:02 AM G58972 2.9 mg/Kg Surr: BFB 86.9 73.8-119 %Rec 4/8/2019 10:12:02 AM G58972 **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 0.015 mg/Kg 4/8/2019 10:12:02 AM B58972 Benzene Toluene ND 0.029 mg/Kg 4/8/2019 10:12:02 AM B58972 Ethylbenzene ND 0.029 mg/Kg 4/8/2019 10:12:02 AM B58972 Xylenes, Total ND 0.059 mg/Kg 4/8/2019 10:12:02 AM B58972 Surr: 4-Bromofluorobenzene 86.5 4/8/2019 10:12:02 AM B58972 80-120 %Rec

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

### **Analytical Report**

Lab Order **1904417**Date Reported: **4/9/2019** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: West-03

 Project:
 Lateral H-21
 Collection Date: 4/5/2019 10:50:00 AM

 Lab ID:
 1904417-002
 Matrix: MEOH (SOIL)
 Received Date: 4/6/2019 10:45:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses EPA METHOD 300.0: ANIONS** Analyst: smb Chloride ND 60 mg/Kg 20 4/8/2019 11:34:53 AM 44191 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: Irm Diesel Range Organics (DRO) ND 9.4 mg/Kg 4/8/2019 11:05:48 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/8/2019 11:05:48 AM 44189 Surr: DNOP 99.4 44189 70-130 %Rec 4/8/2019 11:05:48 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) 33 5 4/8/2019 10:35:33 AM G58972 17 mg/Kg Surr: BFB 94.2 73.8-119 %Rec 4/8/2019 10:35:33 AM G58972 **EPA METHOD 8021B: VOLATILES** Analyst: NSB 0.35 0.084 mg/Kg 4/8/2019 10:35:33 AM B58972 Benzene 5 Toluene 1.4 0.17 mg/Kg 4/8/2019 10:35:33 AM B58972 Ethylbenzene ND 0.17 mg/Kg 5 4/8/2019 10:35:33 AM B58972 Xylenes, Total 0.75 0.33 mg/Kg 5 4/8/2019 10:35:33 AM B58972 Surr: 4-Bromofluorobenzene 80-120 B58972 91.1 %Rec 4/8/2019 10:35:33 AM

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 2 of 7

# Analytical Report Lab Order 1904417

Date Reported: 4/9/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: West-04

 Project:
 Lateral H-21
 Collection Date: 4/5/2019 11:00:00 AM

 Lab ID:
 1904417-003
 Matrix: MEOH (SOIL)
 Received Date: 4/6/2019 10:45:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch Analyses EPA METHOD 300.0: ANIONS** Analyst: smb Chloride ND 60 mg/Kg 20 4/8/2019 11:47:18 AM 44191 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: Irm Diesel Range Organics (DRO) ND 9.9 mg/Kg 4/8/2019 11:28:02 AM ND Motor Oil Range Organics (MRO) 49 mg/Kg 1 4/8/2019 11:28:02 AM 44189 Surr: DNOP 100 44189 70-130 %Rec 4/8/2019 11:28:02 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/8/2019 10:59:09 AM G58972 3.3 mg/Kg Surr: BFB 84.4 73.8-119 %Rec 4/8/2019 10:59:09 AM G58972 **EPA METHOD 8021B: VOLATILES** Analyst: NSB 0.048 0.017 mg/Kg 4/8/2019 10:59:09 AM B58972 Benzene Toluene 0.11 0.033 mg/Kg 4/8/2019 10:59:09 AM B58972 Ethylbenzene ND 0.033 mg/Kg 4/8/2019 10:59:09 AM B58972 Xylenes, Total 0.067 0.067 mg/Kg 4/8/2019 10:59:09 AM B58972 Surr: 4-Bromofluorobenzene 80-120 B58972 84.7 %Rec 4/8/2019 10:59:09 AM

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

Qualifiers:

Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Н

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904417** 

09-Apr-19

Client: Harvest
Project: Lateral H-21

Sample ID: MB-44191 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **44191** RunNo: **58977** 

Prep Date: 4/8/2019 Analysis Date: 4/8/2019 SeqNo: 1984926 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-44191 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 44191 RunNo: 58977

Prep Date: 4/8/2019 Analysis Date: 4/8/2019 SeqNo: 1984927 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.7 90 110

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 4 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904417** 

09-Apr-19

Client: Harvest
Project: Lateral H-21

Sample ID: LCS-44189	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	R											
Prep Date: 4/8/2019 Analysis Date: 4/8/2019				S	eqNo: 1	983691	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	50	10	50.00	0	99.1	63.9	124					
Surr: DNOP	4.3	4.3 5.000			86.0 70							

Sample ID: MB-44189	SampT	уре: <b>МЕ</b>	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch	ID: <b>44</b>	189	F	RunNo: 5	8966					
Prep Date: 4/8/2019	Analysis D	ate: <b>4/</b>	8/2019	9	SeqNo: 1	983692	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	9.6		10.00		95.6	70	130				

#### Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 5 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1904417

09-Apr-19

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

Sample ID: RB SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: **G58972** RunNo: 58972

Prep Date: Analysis Date: 4/8/2019 SeqNo: 1984132 Units: mq/Kq

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 870 1000 87.1 73.8 119

Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: G58972 RunNo: 58972

Prep Date: Analysis Date: 4/8/2019 SeqNo: 1984133 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 0 105 80.1 123

Surr: BFB 1000 1000 102 73.8 119

Sample ID: MB-44115 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 44115 RunNo: 58972

Prep Date: 4/4/2019 Analysis Date: 4/8/2019 SeqNo: 1984136 Units: %Rec

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual

Surr: BFB 890 1000 89.4 73.8 119

Sample ID: LCS-44115 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 44115 RunNo: 58972

Analysis Date: 4/8/2019 Prep Date: 4/4/2019 SeqNo: 1984137 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1000 1000 73.8 Surr: BFB 101 119

Qualifiers:

Holding times for preparation or analysis exceeded

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

Page 6 of 7

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1904417 09-Apr-19

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

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: **B58972** RunNo: 58972 Prep Date: Analysis Date: 4/8/2019 SeqNo: 1984171 Units: mq/Kq SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Benzene ND 0.025 ND 0.050 0.050 ND

Toluene Ethylbenzene Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 0.87 1.000 87.4 80 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: **B58972** RunNo: 58972 Prep Date: Analysis Date: 4/8/2019 SeqNo: 1984172 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.000 0.91 0.025 0 90.6 80 120 Benzene Toluene 0.95 0.050 1.000 0 94.7 80 120 0 93.2 80 Ethylbenzene 0.93 0.050 1.000 120 0 94.3 Xylenes, Total 2.8 0.10 3.000 80 120 0.92 Surr: 4-Bromofluorobenzene 1.000 91.9 80 120

SampType: MBLK TestCode: EPA Method 8021B: Volatiles Sample ID: MB-44115 Client ID: PBS Batch ID: 44115 RunNo: 58972 Prep Date: Analysis Date: 4/8/2019 SeqNo: 1984175 Units: %Rec 4/4/2019 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.91 1.000 90.6 80 Surr: 4-Bromofluorobenzene 120

Sample ID: LCS-44115 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 44115 RunNo: 58972 SeqNo: 1984176 Prep Date: 4/4/2019 Analysis Date: 4/8/2019 Units: %Rec PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual

1.000 Surr: 4-Bromofluorobenzene 0.91 91.0 80 120

#### Qualifiers:

Holding times for preparation or analysis exceeded

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

Page 7 of 7



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 Nar	me: Harvest		Work Ord	er Number	: 1904	1417		Rcpt	No: 1
Received	By: Isaiah C	Ortiz	4/6/2019 10	:45:00 AM			market and	01	
Completed	By: Isaiah C	Ortiz	4/6/2019 11	:32:51 AM			when any	0-1	
Reviewed	By: JC 4	8.19						7.	
	3: TO (								
Chain of	Custody	1/8/17							
	n of Custody com	nolete?			Yes		No 🗌	Not Present	٦
								TOTAL TOTAL E	
Z. How wa	s the sample de	liverea?			Cou	<u>rier</u>			
<u>Log In</u>									
3. Was an	attempt made to	cool the sam	oles?		Yes	<b>✓</b>	No 🗌	NA	
4. Were all	l samples receive	ed at a tempera	ature of >0° C to 6.	0°C	Yes	<b>V</b>	No 🗌	NA 🗆	
_									
5. Sample(	(s) in proper con	tainer(s)?			Yes	<b>V</b>	No 🗀		
6 Sufficien	nt sample volume	for indicated t	eet(e)?		Yes		No 🗆		
			operly preserved?			<b>V</b>	No $\square$		
	servative added		openy preserved?				No 🗹	NA .	1
O. Was pie	servative added	to bottles:			Yes		NO 🖳	NA L	1/
9. VOA vial	ls have zero hea	dspace?			Yes		No 🗌	No VOA Vials	TO
10. Were an	ny sample contai	ners received l	oroken?		Yes		No 🗸		
							Commence	# of preserved bottles checked	4/8/19
11. Does pa	perwork match b	ottle labels?			Yes	<b>~</b>	No 🗌	for pH:	1101
	screpancies on c	215						Adjusted?	2 or >12 unless noted
	ices correctly ide				Yes		No L	Adjusted?	The state of the s
	r what analyses		1?			<b>V</b>	No L	Chacked by	
	holding times ab otify customer for		) 		Yes	<b>V</b>	No 🗀	Checked by	
	=								
Special Ha	andling (if ap	<u>pplicable)</u>							
15. Was clie	ent notified of all	discrepancies	with this order?		Yes		No 🗌	NA 🗹	
Pe	erson Notified:		*	Date:				,	
Ву	Whom:			Via:	еМа	ail 🗀	Phone Fax	In Person	
Re	egarding:								
Cli	ient Instructions:								
16. Addition	nal remarks:								
	Information er No Temp %	Condition	Sool Intent   C-	al Na 📗 🔾	anl D		Cinn - I D		
1	5.9	C Condition Good	Seal Intact Se Yes	al No S	eal Da	ite	Signed By		
2	3.2	Good	Yes						
3	2.8	Good	Yes						

Received	by O	C <b>D:</b> 6	5/28/	2021	11.	:44:	06 A	1 <i>M</i>					T								T	Pag	ge 57	of 129
<u> </u>	MANA hallenvironmental com	4901 Hawkins NE - Albuquerque. NM 87109	10	Analysis		S 'Þ	ОЧ	10 <sup>2</sup> ,	or 8 , <i>N</i> (A(	103 103 103	y 83 h Me h, 1 OA) emi	EDB (M PAHs b SI, F, B S270 (S Odal Co	H H	X	X									as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
	湖	901 F	Tel. 5		10							9 1808			-						ks:			. Any s
		4	•							and the same	وأرساد	PH:80	, ,	<b>×</b>	メ				4	_	Remarks			ssibility
Turn-Around Time: Senedar		Lateral H-71	Project #:		er:		KILON HONG	Sampler Morgan Killion	S Yes □ No		Cooler Temp(including CF): SQ C 3.2 C 28	Container Preservative 190 US	100-	7	2	And the second s					Via: Date Time	Received by: Via: Date Time	Male	This serves
Client: Harvest Mid Streem		Mailing Address: 1755 ARROYO PR	Bloom Field NM 87413	25, 632- 44	email or Fax#: Khong @ horvestmidstreem. Car Project Manag	QA/QC Package:	☐ Standard ☐ Level 4 (Full Validation)	Accreditation:   Az Compliance		□ EDD (Type)		Date Time Matrix Sample Name	1040 5011 West -0 2	1050501	14	9 of 15 miles of 1 mil	F = 12 cm S = 2 cm S = 3 cm S	The second state of the se			Relinquished by:	Time: Relinquished by:	1819 Mathe Moder	If necessary, samples submitted to Hall Environmenta



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

April 08, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lat H21 OrderNo.: 1904246

#### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/4/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**Lab Order **1904246** 

Date Reported: 4/8/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: WS01

 Project:
 Lat H21
 Collection Date: 4/3/2019 8:00:00 AM

 Lab ID:
 1904246-001
 Matrix: AQUEOUS
 Received Date: 4/4/2019 8:14:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: RAA
Benzene	310	10	μg/L	10	4/5/2019 1:47:16 AM	SLW588
Toluene	330	10	μg/L	10	4/5/2019 1:47:16 AM	SLW588
Ethylbenzene	8.3	1.0	μg/L	1	4/4/2019 12:56:45 PM	SLW588
Xylenes, Total	41	1.5	μg/L	1	4/4/2019 12:56:45 PM	SLW588
Surr: 1,2-Dichloroethane-d4	90.6	70-130	%Rec	1	4/4/2019 12:56:45 PM	SLW588
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	4/4/2019 12:56:45 PM	SLW588
Surr: Dibromofluoromethane	90.5	70-130	%Rec	1	4/4/2019 12:56:45 PM	SLW588
Surr: Toluene-d8	94.6	70-130	%Rec	1	4/4/2019 12:56:45 PM	SLW588

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

Qualifiers:

- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

Page 1 of 3

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904246** 

08-Apr-19

Client: Harvest Project: Lat H21

Sample ID: 100ng Ics	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8260: Volatile	es Short L	ist	
Client ID: LCSW	Batch	ID: SL	W58893	F	RunNo: 5	8893				
Prep Date:	Analysis D	ate: 4/	4/2019	8	SeqNo: 1	979907	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	16	1.0	20.00	0	80.6	70	130			
Toluene	20	1.0	20.00	0	98.3	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		85.4	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	8.2				82.4	70	130			
Surr: Toluene-d8	9.6				96.5	70	130			

Sample ID: rb	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: PBW	Batcl	n ID: SL	W58893	F	RunNo: 5	8893				
Prep Date:	Analysis D	Date: 4/	4/2019	\$	SeqNo: 1	979909	Units: µg/L			
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	8.3		10.00		83.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	8.4		10.00		83.6	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID: 1904246-001a ms	SampT	ype: <b>MS</b>	3	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: WS01	Batch	ID: SL	W58893	F	RunNo: <b>5</b> 8	8893				
Prep Date:	Analysis D	ate: <b>4/</b>	4/2019	8	SeqNo: 1	982717	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	240	1.0	20.00	224.7	75.4	70	130			Е
Toluene	220	1.0	20.00	203.3	97.2	70	130			E
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.7	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID: 1904246-001a msd	SampT	ype: <b>MS</b>	SD	Test	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: WS01	Batch	ID: SL	W58893	R	RunNo: 58	8893				
Prep Date:	Analysis D	ate: 4/	4/2019	S	SeqNo: 1	982718	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	230	1.0	20.00	224.7	20.1	70	130	4.72	20	ES
Toluene	210	1.0	20.00	203.3	40.4	70	130	5.24	20	ES

#### Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

Page 2 of 3

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1904246** 

08-Apr-19

Client: Harvest Project: Lat H21

Sample ID: 1904246-001a m	sd SampT	ype: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8260: Volatile	es Short L	ist	
Client ID: WS01	Batch	n ID: SL	.W58893	F	RunNo: <b>5</b>	8893				
Prep Date:	Analysis D	ate: 4/	4/2019	S	SeqNo: 1	982718	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.5	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	9.2		10.00		92.5	70	130	0	0	
Surr: Toluene-d8	9.4		10.00		93.9	70	130	0	0	

#### Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

Page 3 of 3



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	: 190	4246		RcptNo	: 1
Received By:	Yazmine (	Garduno	4/4/201	9 8:14:00 AM			Nazmin léfindus	Ĭ.	
Completed By:	Leah Bac	а	4/4/201	9 8:41:38 AM			1.1 Bas		
Reviewed By:	ENM	,	4/4	119			Last Janes		
Lubeled b	- W	5 4/	ali a						
Chain of Cus	tody	7	9/ 9						
1. Is Chain of Cu	ustody comp	lete?			Yes	<b>V</b>	No 🗌	Not Present	
2. How was the	sample deliv	ered?			Cou	rier			
l og In									
Log In  3. Was an attern	ot made to c	ool the samn	les?		Yes	<b>V</b>	No 🗌	NA 🗆	
	pr mado to c	oor the sump			163		140	NA L	
4. Were all samp	les received	at a tempera	ture of >0° C	to 6.0°C	Yes	<b>V</b>	No 🗌	NA 🗆	
5 Canada (a) in a							$\Box$		
5. Sample(s) in p	proper contai	ner(s)?			Yes	<b>V</b>	No 📙		
6. Sufficient sam	ple volume f	or indicated te	est(s)?		Yes	<b>V</b>	No 🗌		
7. Are samples (	except VOA	and ONG) pro	perly preserve	ed?	Yes	<b>✓</b>	No 🗌		
8. Was preservat	ive added to	bottles?			Yes		No 🗹	NA $\square$	
9. VOA vials have	a zara haada	2222			v		No. 🗆	N- VOA VI-L	
10. Were any sam			rokon?		Yes Yes		No ∟ No ✔	No VOA Vials	
10, were any san	ipie containe	is received b	iokeii?		res		NO 💌	# of preserved	
11. Does paperwo	rk match bot	tle labels?			Yes	<b>V</b>	No 🗌	bottles checked for pH:	
(Note discrepa		-							>12 unless noted)
12. Are matrices c	1.53		•		Yes		No 📙	Adjusted?	
13. Is it clear what 14. Were all holdir		350	?			<b>V</b>	No ∐	Checked by:	LD Ulch
(If no, notify cu					Yes		No 📙	Checked by.	1991
Special Handli	na (if ann	licable)							
15. Was client not			vith this order?	•	Yes		No 🗌	NA 🗹	
Person i	Notified:			Date					
By Who	m:	-		Via:	□ eM	ail [	Phone Fax	☐ In Person	
Regardi	ng:								
Client In	structions:								
16. Additional ren	narks:								
17. Cooler Inform	nation								
Cooler No	Temp °C	Condition	Seal Intact	Seal No S	Seal D	ate	Signed By		
1	2.3	Good	Yes	A CONTRACTOR OF THE CONTRACTOR					

Cha	Chain-of-Custody Record	Turn-Around Time:	Time:	Same Day						Ò		į	į	Recei
Client: He	Harvest Four corners	☐ Standard	⊠ Rush	4/4/19		T	ANA		N I	¥ =	ABODATOD.		TOTAL STATE	. >
	l .	Project Name:										5		=
Mailing Address:	Š	70t.	HYI		4	4901 Hawkins NF	www. Wkins N	י פֿ		www.italieliviioliiielital.com	NM 87	7109		C <b>D</b> : 6
		Project #:			-	Tel. 505	505-345-3975	10	Fax	505-345-4107	5-410	20. 7		5/28/
Phone #:	970 -385-1096			- 100				Ans	Analysis	Request	st			2021
email or Fax#:	x#: Khono @ horvest. com	Project Manager:						0	70	(+0	(11)			11:
QA/QC Package:	ige:	X. 52	Hong.	Horvest			SW	5 (	0 17		iasa:			44:0
y Standard	I Level 4 (Full Validation)	Brook	Herb-	LTE			IIS0	Ja	0.11	V/+u	₩/III			06 A
Accreditation:			100	avroll		2808		OIN	701		1222		1	M
□ NELAC		On Ice:	Yes	No		/SƏ			10.		١ (١ـ		- 2	
X EDU(1)	pe) Fui-	# of Coolers: L Cooler Temp(including CF)	1 including CF 13 3cm	2 te (000)		bioit				Hall.	шоі			
		Container	Preservative		4- KX3	sag 18	B (Me	18 AR: F, Br,	OV) 08	19S) 07	iloO la:			
Date Time	e Matrix Sample Name	Type and #	Type	1964246		308					10.1			
413140800	00 GW WS 01	3 1044	HCI	100-	) ×									
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	37							1 1						
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			1 (1)	Application is a second of the					2-					
	Relingu	Received by:	Via:	jĒ i	Remarks:	S:		Ξ						
<b>711</b> 520 Date: Time:	Relinquished by:	Received by:	Via:	13/19 /32c.										Pag
4/3/14 1810		Thue	anne	4							a 1			ge 63 o <sub>j</sub>
If nece	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.	ibcontracted to other ac	credited laboratorie	s. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	possibility.	Any sub-c	ontracted	data will	be clearl	y notated	on the an	nalytical re	port.	f 129



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

April 16, 2019

**Brooke Herb** 

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 21 OrderNo.: 1904615

#### Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/11/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

# **Analytical Report**Lab Order **1904615**

Date Reported: 4/16/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: Lat H-21

 Project:
 Lateral H 21
 Collection Date: 4/10/2019 9:10:00 AM

 Lab ID:
 1904615-001
 Matrix: GROUNDWA
 Received Date: 4/11/2019 8:05:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: RAA
Benzene	140	10	μg/L	10	4/11/2019 3:00:00 PM	SL59071
Toluene	89	1.0	μg/L	1	4/11/2019 9:33:00 AM	B59035
Ethylbenzene	2.7	1.0	μg/L	1	4/11/2019 9:33:00 AM	B59035
Xylenes, Total	20	1.5	μg/L	1	4/11/2019 9:33:00 AM	B59035
Surr: 1,2-Dichloroethane-d4	96.3	70-130	%Rec	1	4/11/2019 9:33:00 AM	B59035
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	4/11/2019 9:33:00 AM	B59035
Surr: Dibromofluoromethane	92.2	70-130	%Rec	1	4/11/2019 9:33:00 AM	B59035
Surr: Toluene-d8	98.0	70-130	%Rec	1	4/11/2019 9:33:00 AM	B59035

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

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

### Hall Environmental Analysis Laboratory, Inc.

23

10

9.8

9.9

1.0

20.00

10.00

10.00

10.00

WO#: **1904615** 

16-Apr-19

Client:	Harvest
<b>Project:</b>	Lateral H 21

Sample ID: 100ng lcs2	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8260: Volatile	es Short L	_ist	
Client ID: LCSW	Batch	1D: <b>B5</b>	9035	F	RunNo: 5	9035				
Prep Date:	Analysis D	ate: 4/	11/2019	S	SeqNo: 1	988561	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.5	70	130			
Surr: Dibromofluoromethane	10		10.00		99.7	70	130			
Surr: Toluene-d8	9.3		10.00		93.0	70	130			
Sample ID: rb2	SampT	уре: МЕ	BLK	Tes	tCode: E	PA Method	8260: Volatile	es Short L	_ist	
Client ID: PBW	Batch	1D: <b>B5</b>	9035	F	RunNo: 5	9035				
Prep Date:	Analysis D	ate: 4/	11/2019	8	SeqNo: 1	988562	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	9.3		10.00		93.2	70	130			
Sample ID: 100ng lcs	SampT	ype: <b>LC</b>	s	Tes	tCode: E	PA Method	8260: Volatile	es Short L	_ist	
Client ID: LCSW	Batch	ID: SL	59071	F	RunNo: 5	9071				
Prep Date:	Analysis D	ate: 4/	11/2019	\$	SeqNo: 1	988870	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: Toluene-d8	9.4		10.00		94.2	70	130			
Sample ID: rb	SampType: <b>MBLK</b>			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: PBW	Batcl	n ID: SL	59071	F	RunNo: 5	9071				
Prep Date:	Analysis D	Date: 4/	11/2019	S	SeqNo: 1	988871	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	9.3		10.00		92.9	70	130			

0

114

101

98.2

99.5

70

70

70

70

130

130

130

130

#### Qualifiers:

Benzene

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode

Page 2 of 2



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: 1904615 RoptNo: 1 Received By: **Desiree Dominguez** 4/11/2019 8:05:00 AM Completed By: Anne Thorne 4/11/2019 8:18:21 AM 4/11/19 Reviewed By: Ar 04/11/19 Chain of Custody 1. Is Chain of Custody complete? No 🗌 Not Present Yes 🔽 2. How was the sample delivered? Courier Log In NA 🗌 3. Was an attempt made to cool the samples? Yes 🗸 No 🗌 No ... Were all samples received at a temperature of >0° C to 6.0°C NA 🗌 Yes 🗹 Sample(s) in proper container(s)? Yes 🔽 No 🔲 6. Sufficient sample volume for indicated test(s)? Yes 🔽 7. Are samples (except VOA and ONG) properly preserved? Yes No 🗸 8. Was preservative added to bottles? Yes NA 🗆 9. VOA vials have zero headspace? Yes 🔽 No No VOA Vials Yes □ No 🗹 10. Were any sample containers received broken? # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 for pH: Yes 🔽 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 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? No 🗌 Yes 🗹 Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes 🗌 No 🗆 NA 🗸 Person Notified: Date By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact | Seal No | Seal Date 0.6 Good Yes

Chain-of-Custody Record Turn-Around Time:  Client: 片のと Midsheam  Mailing Address: 1子公 Arrays Dr Lateral は All Blosin Field, Um 87413 Project #:  Phone #:	HALL ENVIRONMENTAL ANALYSIS LABORATORY  www.hallenvironmental.com kins NE - Albuquerque, NM 87109  845-3975 Fax 505-345-4107 Analysis Request
C Project Manager:  □ Level 4 (Full Validation)  □ Level 4 (Full Validation)  ○ Compliance  □ Level 4 (Full Validation)  ○ Compliance  □ Level 4 (Full Validation)  ○ Compliance  □ No Compliance  □ No Compliance  □ No Compliance  □ No Compliance  □ Montree	8260 (VOA)  8270 (Semi-VOA)  Total Coliform (Present/Absent)
X	
Date: Time: Relinquished by:  4-0-14 1230  Date: Time: Relinquished by:  Received by: Via: Date Time  Plate: Time: Relinquished by:  All 1/19 8:05  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.	Sherth & thru. com sed 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

April 24, 2019

**Brooke Herb** 

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

**FAX** 

RE: Lateral H-21 OrderNo.: 1904A83

#### Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/23/2019 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report
Lab Order 1904A83

Date Reported: 4/24/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: Lateral H-21

 Project:
 Lateral H-21
 Collection Date: 4/22/2019 1:30:00 PM

 Lab ID:
 1904A83-001
 Matrix: GROUNDWA
 Received Date: 4/23/2019 8:05:00 AM

Result **RL Qual Units DF** Date Analyzed Batch **Analyses EPA METHOD 8260: VOLATILES SHORT LIST** Analyst: RAA Benzene 31 2.0 μg/L 2 4/23/2019 11:09:34 AM R59354 Toluene 36 2.0 μg/L 2 4/23/2019 11:09:34 AM R59354 ND Ethylbenzene 2.0 μg/L 2 4/23/2019 11:09:34 AM R59354 Xylenes, Total 5.5 2 4/23/2019 11:09:34 AM R59354 3.0 μg/L Surr: 1,2-Dichloroethane-d4 96.2 70-130 %Rec 4/23/2019 11:09:34 AM R59354 Surr: 4-Bromofluorobenzene 96.1 70-130 %Rec 2 4/23/2019 11:09:34 AM R59354 Surr: Dibromofluoromethane 104 70-130 %Rec 2 4/23/2019 11:09:34 AM R59354 4/23/2019 11:09:34 AM R59354 Surr: Toluene-d8 97.6 70-130 %Rec

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1904A83** 

24-Apr-19

Client: Harvest
Project: Lateral H-21

Sample ID: 100ng Ics	SampType: LCS			TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch ID: <b>R59354</b>			F	RunNo: <b>5</b>	9354				
Prep Date:	Analysis Date: 4/23/2019		SeqNo: 1999097			Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.6	70	130			
Toluene	19	1.0	20.00	0	95.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: <b>rb</b> SampType: <b>MBLK</b>			BLK	TestCode: EPA Method 8260: Volatiles Short List							
Client ID: PBW	Batch ID: <b>R59354</b>			RunNo: <b>59354</b>							
Prep Date:	Analysis Date: 4/23/2019		SeqNo: 1999099			Units: µg/L					
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	9.6		10.00		95.9	70	130				
Surr: 4-Bromofluorobenzene	9.8		10.00		97.8	70	130				
Surr: Dibromofluoromethane	10		10.00		102	70	130				
Surr: Toluene-d8	9.5		10.00		94.8	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 Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 2



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 Numbe	r: 1904A8	3		Rcpt <b>N</b> o	: 1
Received By:	Erin Melendrez	4/23/2019 8:05:00 AN	4	U_0	4		
Completed By:				2	14 In		
Reviewed By:	Anne Thorne	4/23/2019 8:59:50 AN 4 /23/19	1	Anne,	Show		
106.60	1 .						
Chain of Cus	stody	4/23/19					
_	ustody complete?		Yes 🗸	No [		Not Present	
2. How was the	sample delivered?		<u>Courier</u>				
Log In							
	npt made to cool the s	amples?	Yes 🗸	No [		NA 🗆	
4. Were all same	ples received at a tem	perature of >0° C to 6.0°C	Yes 🔽	No [		NA 🗆	
······································		,	103 🖳	_		101	
5. Sample(s) in	proper container(s)?		Yes 🗸	No [			
6. Sufficient sam	nple volume for indicat	ed test(s)?	Yes 🗹	No [		•	
7. Are samples (	except VOA and ONG	properly preserved?	Yes 🗹	No [			
8. Was preserva	tive added to bottles?		Yes 🗌	No S	<b>2</b>	NA 🗆	
9. VOA vials hav	e zero headspace?	pea Size bubbles	Yes	No <u></u>	<b>∠</b> No	VOA Vials	
10. Were any san	mple containers receiv	ed broken?	Yes $\square$	No B			
		04/23/19		_		f preserved tles checked	
	ork match bottle labels ancies on chain of cus		Yes 🗹	No L	_  for	pH: (<2 or	>12 unless noted)
	correctly identified on (		Yes 🗹	No 🗆		Adjusted?	· · · · · · · · · · · · · · · · · · ·
13. Is it clear what	t analyses were reque	sted?	Yes 🗸	No 🗆			
	ng times able to be me ustomer for authorizati		Yes 🗹	No 🗆		Checked by:	
	ing (if applicable	•					
	tified of all discrepanc	_	Yes 🗌	No [	7	NA 🗹	
	Notified:						]
By Who	· · · · · · · · · · · · · · · · · · ·	Date Via:	eMail	Phone   F	Fax 🗆 I	n Person	
Regardi	***************************************	via. [	_ civiali (		ax	II FEISON	
	structions:			****			
16. Additional rer	marks:						J
17. Cooler infor	mation						
Cooler No		ion Seal Intact Seal No S	Seal Date	Signed By	,		
1	1.6 Good	Yes		na angla na haid ini ini ing mga giga giga da ga ing biga ing mg			

	HALL ENVIKONMENTAL ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	5-3975 Fax 505-345-4107	۸na		S' <sup>†</sup> (	0d' <sup>°</sup>	: 0728 ; 008;	or 8	10 CI, icicic AC)	EDB (Metl RCRA 8 M Anions (F, 8081 Pest 8260B (VC 8270 (Sen							cc: bieris @ltenv.com	mandonosithe tenucian Tshoit Octenucan	toted data will be clearly notated on the analytical report.
Turn-Around Time:	□ Standard X Rush Sove Do.	Project Name:	teral H-21		0903 HO32	(ʎju	305	3) <b>/\$(</b> )	Н <b>Ч</b> Т 0 \ 0	- Free - 1 (2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Container Preservative HEAL No. X X 8 80 Trype Type Type Type Type The HEAL No. X X 8 80 Trype T	(3) novis   1/47   X   1/2						 1 Met 4/22/19 1520	Received by: COUNTIES Date Time	
Chain-of-Custody Record	Client: Havest Four Corners	Kilun Hong	Mailing Address: 1795 Aroyo Dr	Bloomfield, NIM 87413	元 元	email or Fax#: Khong & havest midstream: Com	QA/QC Package:	X Standard   Level 4 (Full Validation)	Accreditation ☐ NELAP ☐ Other	(J. (ar.)	A LDD (1970)	Date Time Matrix Sample Request ID	4-20-19 13:30 GW Lateral 14-21						Date: Time: Relinquished by/	Date: Time: Relinquished by:	if necessary, samples submitted to Hall Environmental may be subc



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

May 15, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lat H21 OrderNo.: 1905528

### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/10/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Date Reported: 5/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: WS-5919

 Project:
 Lat H21
 Collection Date: 5/9/2019 12:15:00 PM

 Lab ID:
 1905528-001
 Matrix: AQUEOUS
 Received Date: 5/10/2019 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	RAA
Benzene	220	10	μg/L	10	5/14/2019 12:08:00 PM	SL59875
Toluene	160	10	μg/L	10	5/14/2019 12:08:00 PM	SL59875
Ethylbenzene	3.8	1.0	μg/L	1	5/13/2019 4:47:00 PM	SL59839
Xylenes, Total	24	1.5	μg/L	1	5/13/2019 4:47:00 PM	SL59839
Surr: 1,2-Dichloroethane-d4	96.5	70-130	%Rec	1	5/13/2019 4:47:00 PM	SL59839
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/13/2019 4:47:00 PM	SL59839
Surr: Dibromofluoromethane	98.0	70-130	%Rec	1	5/13/2019 4:47:00 PM	SL59839
Surr: Toluene-d8	99.7	70-130	%Rec	1	5/13/2019 4:47:00 PM	SL59839

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1905528** 

15-May-19

Client: Harvest Project: Lat H21

Sample ID: 100ng lcs	SampT	ype: LC	s	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: LCSW	Batch	ID: SL	.59839	F	RunNo: 5	9839				
Prep Date:	Analysis D	ate: <b>5/</b>	13/2019	8	SeqNo: 2	018195	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.8		10.00		98.2	70	130			
Sample ID: RB	Tes	tCode: El	PA Method	8260: Volatil	es Short L	ist	·			

Campio ib. KB	Camp.	JPO. IIIL	, L. I.	recteded. El Ametrica 9200. Voluntes Griori Elst							
Client ID: PBW	Batch	ID: SL	59839	F	RunNo: 5	9839					
Prep Date:	Analysis D	ate: <b>5/</b>	13/2019	9	SeqNo: 2	018197	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	1.5									
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130				
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130				
Surr: Dibromofluoromethane	10		10.00		102	70	130				
Surr: Toluene-d8	9.7		10.00		96.6	70	130				

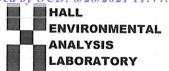
Sample ID: 100ng lcs	Sampl	ype: LC	s	TestCode: EPA Method 8260: Volatiles Short List							
Client ID: LCSW	Batc	n ID: SL	.59875	F	RunNo: <b>5</b>	9875					
Prep Date:	Analysis D	Date: 5/	14/2019	5	SeqNo: 2	020132	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	20	1.0	20.00	0	98.9	70	130				
Toluene	20	1.0	20.00	0	99.1	70	130				
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130				
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130				
Surr: Dibromofluoromethane	10		10.00		99.8	70	130				
Surr: Toluene-d8	9.7		10.00		96.8	70	130				

Sample ID: rb	BLK	TestCode: EPA Method 8260: Volatiles Short List								
Client ID: PBW	Batch	ID: SL	59875	F	RunNo: <b>5</b>					
Prep Date:	Analysis D	Analysis Date: 5/14/2019			SeqNo: 2	020133	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- 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	: 1905528	3	RcptNo:	1
Received By:	Jevon Campis	si 5/10/20 <sup>-</sup>	19 8:00:00 AM		Aprol Compari		
Completed By: Reviewed By:	Isaiah Ortiz ENH JC 5-	5/10/20 5/10/	19 9:31:01 AM		Jew Campial I — C	24	
Chain of Cus	tody						
1. Is Chain of Cu				Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered	?		Courier			
Log In  3. Was an attern	pt made to cool t	the samples?		Yes 🗸	No 🗆	NA 🗆	
4. Were all samp	les received at a	temperature of >0° C t	o 6.0°C	Yes 🗸	No 🗆	NA 🗆	
5. Sample(s) in p	proper container(	s)?		Yes 🗸	No 🗌		
6. Sufficient sam				Yes 🗹	No 🗆		
		ONG) properly preserve	d?	Yes 🗸	No 📙		1/
<ol><li>Was preservat</li></ol>	ive added to bott	les?		Yes	No 🔽	NA L	5/10
9. VOA vials have				Yes T	No □ No ☑	No VOA Vials	ng 5/15
11. Does paperwo	rk match bottle la	abels?		Yes 🗸	No $\square$	# of preserved bottles checked for pH:	
	ncies on chain of	5.50		v [4]		Adjusted?	>12 unless noted)
13. Is it clear what		on Chain of Custody?		Yes ✓ Yes ✓	No □ No □	riajacioa.	
14. Were all holding				Yes 🗹	No 🗆	Checked by:	C 5-10-
	stomer for autho	**************************************					
Special Handli 15. Was client not		able) pancies with this order?		Yes 🗌	No 🗌	NA 🗹	
Person By Who	Notified:		Date:	] aMail [	The state of the s		
Regardi	,		Via.	eMail [	Phone Fax	In Person	
	structions:						
16. Additional rer	narks:			***************************************			
17. <u>Cooler Information</u> Cooler No	Temp °C C	ondition   Seal Intact	Seal No S	Seal Date	Signed By	-	
1	1.1 Go	od Yes					

Received by OCD: 6/28/2021	11:44:06 AM	Page 78 of 129
<b>→</b> ≿		
ENVIRONMENTAL YSIS LABORATOR environmental.com Albuquerque, NM 87109 Fax 505-345-4107 alysis Request		7. T.
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BC com	(1100011111000111)	m the
TRONNS LABOI  LABOI  mental.com  erque, NM 87- 505-345-4107  Request	Total Coliform (Present/Absent)	taled o
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HALL ENVIRONME ANALYSIS LABORA www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	bhabe Itank. com
	RCRA 8 Metals	
HALL ANAL www.hal Hawkins NE - 505-345-3975	PAHs by 8310 or 8270SIMS	the digital state of the state
N v v wwkin 5-345	EDB (Method 504.1)	- Contra
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M G	Project Manager:    Ki JUM HONG   Brooke Herb   Sampler: Eric co   On Ice: Eric co   On Ice: Eric co   Cooler Temp(including cr):     Container   Preservati   Type and # Type	Via: Via: Court (EK.
	Project Manager:    K i JUM   H 0   B rooke   He   Sampler:   Eric   On Ice:   Eric   On Ice:   Erese   Cooler Temp(including     Container   Prese   Type and #   Type	accred in the state of the stat
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Turn-Around T  Standard  Project Name:  Lat  Project #:	Project Manag    Ki JUN     B 700/ce     Sampler: E,     On Ice:     # of Coolers:     Cooler Tempo     Container     Type and #	Received by:
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V Record	ull V	1/9 M
dy R Coyo	4 (F	5919 Male Survivolment
Lody Forces	Khong & harbestmicts    Level 4 (Full V   Az Compliance   Other     DDF   Matrix   Sample Name	by:
Custod E Four Hong 755 And Field, M	Sau Sau	Relinquished by:
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Client: Harve  Kijur  Mailing Address:  Bloome #: 5	email or Fax#:  QA/QC Package:	5/4/19 Date: 5/4/19 Date: 5/9/19
10   12   14		0 20 0



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

June 06, 2019

Brooke Herb

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413 TEL: (505) 632-4475

TLE. (500

FAX

RE: Lateral H 21 OrderNo.: 1906063

#### Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/4/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Date Reported: 6/6/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: Lateral H-21

 Project:
 Lateral H 21
 Collection Date: 6/3/2019 11:15:00 AM

 Lab ID:
 1906063-001
 Matrix: GROUNDWA
 Received Date: 6/4/2019 8:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: DJF
Benzene	39	1.0	μg/L	1	6/4/2019 11:42:02 AM	SL60366
Toluene	5.4	1.0	μg/L	1	6/4/2019 11:42:02 AM	SL60366
Ethylbenzene	ND	1.0	μg/L	1	6/4/2019 11:42:02 AM	SL60366
Xylenes, Total	ND	1.5	μg/L	1	6/4/2019 11:42:02 AM	SL60366
Surr: 1,2-Dichloroethane-d4	89.6	70-130	%Rec	1	6/4/2019 11:42:02 AM	SL60366
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	6/4/2019 11:42:02 AM	SL60366
Surr: Dibromofluoromethane	82.6	70-130	%Rec	1	6/4/2019 11:42:02 AM	SL60366
Surr: Toluene-d8	99.5	70-130	%Rec	1	6/4/2019 11:42:02 AM	SL60366

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1906063** 

06-Jun-19

Client: Harvest
Project: Lateral H 21

Sample ID: <b>rb</b>	Samp1	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8260: Volatile	es Short I	∟ist	
Client ID: PBW	Batc	h ID: SL	60366	F	RunNo: 6	0366				
Prep Date:	Analysis [	Date: <b>6/</b>	4/2019	8	SeqNo: 2	041311	Units: µg/L			
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	9.0		10.00		90.5	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.0	70	130			
Surr: Dibromofluoromethane	7.7		10.00		76.9	70	130			
Surr: Toluene-d8	9.6		10.00		95.8	70	130			

Sample ID: 100ng Ics	SampT	ype: <b>LC</b>	PA Method	8260: Volatile	es Short L	ist				
Client ID: LCSW	Batch	n ID: SL	60366	F	RunNo: 6	0366				
Prep Date:	Analysis D	ate: 6/	4/2019	\$	SeqNo: 2	041312	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.7	70	130			
Toluene	18	1.0	20.00	0	92.2	70	130			
Surr: 1,2-Dichloroethane-d4	8.1		10.00		81.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	7.5		10.00		75.5	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: 1906063-001a ms	Samp1	ype: MS	3	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: Lateral H-21	Batcl	n ID: SL	60366	F	RunNo: 6	0366				
Prep Date:	Analysis D	Date: 6/	4/2019	5	SeqNo: 2	042254	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	56	1.0	20.00	38.56	86.6	70	130			
Toluene	23	1.0	20.00	5.383	88.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.1	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	8.0		10.00		80.4	70	130			
Surr: Toluene-d8	9.5		10.00		95.0	70	130			

Sample ID: 1906063-001a msc	<b>l</b> SampT	ype: <b>MS</b>	SD	Test	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: Lateral H-21	Batch	ID: SL	60366	R	tunNo: 60	0366					
Prep Date:	Analysis D	ate: 6/	4/2019	S	SeqNo: 20	042255	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	54	1.0	20.00	38.56	79.6	70	130	2.52	20		
Toluene	24	1.0	20.00	5.383	94.0	70	130	4.81	20		

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1906063** 

06-Jun-19

Client: Harvest
Project: Lateral H 21

Sample ID: 1906063-001a msd SampType: MSD TestCode: EPA Method 8260: Volatiles Short List Client ID: Lateral H-21 Batch ID: SL60366 RunNo: 60366 Prep Date: Analysis Date: 6/4/2019 SeqNo: 2042255 Units: µg/L Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Surr: 1,2-Dichloroethane-d4 8.7 10.00 87.1 70 130 0 0 Surr: 4-Bromofluorobenzene 9.9 10.00 99.3 70 130 0 0 0 Surr: Dibromofluoromethane 7.8 10.00 78.0 70 0 130 Surr: Toluene-d8 10 101 70 0 0 10.00 130

#### 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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 3

ENVIRONMENTAL ANALYSIS LABORATORY Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Harvest	Work Order Nur	nber: 1906063		RcptNo: 1				
Received By: Jevon Campis	i 6/4/2019 8:10:00	AM	Java Campisi					
Completed By: Leah Baca	6/4/2019 8:15:54	AM	Jun Campisi Last Stava					
Reviewed By:	4114		Lawys					
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	he 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 ind	licated test(s)?	Yes 🗸	No 🗌					
7. Are samples (except VOA and C	ONG) properly preserved?	Yes 🗸	No 🗌					
8. Was preservative added to bottle	es?	Yes	No 🗸	NA 🗌				
9. VOA vials have zero headspace	?	Yes 🗸	No 🗌	No VOA Vials				
10. Were any sample containers re-	ceived broken?	Yes	No 🗸	# of preserved				
11. Does paperwork match bottle lal (Note discrepancies on chain of		Yes 🗸	No 🗌	bottles checked for pH: (<2 or	>12 unless noted)			
12. Are matrices correctly identified		Yes 🗸	No 🗌	Adjusted?	,			
13. Is it clear what analyses were re	quested?	Yes 🗸	No 🗌		1.1			
<ol> <li>Were all holding times able to be (If no, notify customer for author</li> </ol>		Yes 🗸	No 🗆	Checked by:	LB 6/4/19			
Special Handling (if applica	ble)							
15. Was client notified of all discrep		Yes	No 🗌	NA 🗸				
Person Notified:	Date							
By Whom:	Via:	eMail P	hone  Fax	In Person				
Regarding:								
Client Instructions: 1  16. Additional remarks:								
17. Cooler Information  Cooler No Temp °C Co	ndition   Seal Intact   Seal No	Seal Date	Signed By					
1 4.6 Good		Jean Date	Signed by					

Received by OCD: 6/28/2021	11:44:06 AM	Page 84 of 129
HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request	EDB (Method 504.1)	Date Time Remarks: L. pherbe Herw. Com  Date Time Structory  6+4-19 8-10  This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
21 Ha	8081 Pesticides/8082 PCB's	C c
4901 Tel.	(ORN \ ORO \ DRO \ DRO \ MRO)	Remarks:
	(8021)	this poss
Turn-Around Time:  □ Standard \(\mathbb{R}\) \(\mathbb{R}\) \(\mathbb{R}\) \(\mathbb{L}\) \(\mathbb{R}\) \(\ma	Congroject Manager:  Browle Herb Sampler: Josh Ackin S On Ice: Types   No   Type and # Type   Preservative   Processes    Container   Preservative   Processes   Type and # Type   Processes    Container   Preservative   Preservative   Type and # Type   Processes    Container   Preservative   Preservative   Type and # Type   Type   Processes   Type   Proc	
Client: Harrest Kinn Hong Mailing Address: 175 Aprox D. Phone #:	email or Fax#: Khong a harvest mosstra in conceptation and conceptation:  Accreditation: Az Compliance  NELAC Other  Date Time Matrix Sample Name  6.3-14 1115 CW Harriz H-2)	Date: Time: Relinquished by: Via: Control of Incressary, samples submitted to Hall Environmental may be subcouracted to other accredited laboratories.



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

July 31, 2019

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 21 OrderNo.: 1907883

### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/18/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 19, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

**Analytical Report** 

Lab Order: **1907883**Date Reported: **7/31/2019** 

## Hall Environmental Analysis Laboratory, Inc.

\_

CLIENT: Harvest Lab Order: 1907883

**Project:** Lateral H 21

**Lab ID:** 1907883-001 **Collection Date:** 7/17/2019 11:45:00 AM

Client Sample ID: TMW01 Matrix: AQUEOUS

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 Ρ 7/18/2019 10:39:13 AM B61481 μg/L 1 Toluene ND 1.0 Ρ μg/L 7/18/2019 10:39:13 AM B61481 ND Р Ethylbenzene 1.0 μg/L 1 7/18/2019 10:39:13 AM B61481 Xylenes, Total ND 2.0 Ρ 7/18/2019 10:39:13 AM B61481 μg/L Р Surr: 4-Bromofluorobenzene 80-120 7/18/2019 10:39:13 AM B61481 94.9 %Rec

**Lab ID:** 1907883-002 **Collection Date:** 7/17/2019 12:00:00 PM

Client Sample ID: TMW02 Matrix: AQUEOUS

Analyses Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene 49 1.0 μg/L 7/18/2019 11:01:55 AM B61481 1 Toluene ND 1.0 μg/L 7/18/2019 11:01:55 AM B61481 ND Ethylbenzene 1.0 7/18/2019 11:01:55 AM B61481 μg/L 1 Xylenes, Total ND 2.0 μg/L 1 7/18/2019 11:01:55 AM B61481 Surr: 4-Bromofluorobenzene 91.5 80-120 %Rec 7/18/2019 11:01:55 AM B61481

**Lab ID:** 1907883-003 **Collection Date:** 7/17/2019 12:15:00 PM

Client Sample ID: TMW03 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed Analyses Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 Ρ μg/L 7/18/2019 11:24:37 AM B61481 1 Toluene ND 1.0 Ρ μg/L 7/18/2019 11:24:37 AM B61481 Ethylbenzene ND 1.0 Р 7/18/2019 11:24:37 AM B61481 μg/L 1 Xylenes, Total ND 2.0 Ρ 7/18/2019 11:24:37 AM B61481 µg/L Surr: 4-Bromofluorobenzene 80-120 Р 7/18/2019 11:24:37 AM B61481 93.2 %Rec

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**Analytical Report** 

Lab Order: 1907883

Date Reported: 7/31/2019

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Lab Order: 1907883

**Project:** Lateral H 21

**Lab ID:** 1907883-004 **Collection Date:** 7/17/2019 12:30:00 PM

Client Sample ID: TMW04 Matrix: AQUEOUS

RL Qual Units DF Date Analyzed **Analyses** Result **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 Ρ 7/18/2019 11:47:17 AM B61481 μg/L 1 Toluene ND 1.0 Ρ μg/L 7/18/2019 11:47:17 AM B61481 ND Р Ethylbenzene 1.0 μg/L 1 7/18/2019 11:47:17 AM B61481 Xylenes, Total ND 2.0 Ρ μg/L 7/18/2019 11:47:17 AM B61481 Р Surr: 4-Bromofluorobenzene 90.7 80-120 7/18/2019 11:47:17 AM B61481 %Rec

**Lab ID:** 1907883-005 **Collection Date:** 7/17/2019 12:45:00 PM

Client Sample ID: TMW05 Matrix: AQUEOUS

**Analyses** Result RL Qual Units DF Date Analyzed **Batch ID EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 1.0 Ρ μg/L 7/18/2019 12:09:59 PM B61481 1 Ρ Toluene ND 1.0 μg/L 7/18/2019 12:09:59 PM B61481 ND Ρ Ethylbenzene 7/18/2019 12:09:59 PM B61481 1.0 μg/L 1 Xylenes, Total ND 2.0 Ρ µg/L 1 7/18/2019 12:09:59 PM B61481 Surr: 4-Bromofluorobenzene 917 80-120 %Rec 7/18/2019 12:09:59 PM B61481

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: **1907883** 

31-Jul-19

Client: Harvest
Project: Lateral H 21

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBW Batch ID: B61481 RunNo: 61481

Units: µg/L Prep Date: Analysis Date: 7/18/2019 SeqNo: 2084479 PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Benzene ND 1.0 Toluene ND 1.0 ND 1.0 Ethylbenzene Xylenes, Total ND 2.0 Surr: 4-Bromofluorobenzene 19 20.00 93.8 80 120

Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSW Batch ID: **B61481** RunNo: 61481 Units: µg/L Prep Date: Analysis Date: 7/18/2019 SeqNo: 2084480 Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 18 20.00 90.7 80 120 1.0 Benzene Toluene 18 1.0 20.00 0 90.5 80 120 0 89.8 80 120 Ethylbenzene 18 1.0 20.00 54 2.0 60.00 0 90.6 80 120 Xylenes, Total Surr: 4-Bromofluorobenzene 20 20.00 97.6 80 120

Sample ID: 1907883-001AMS	SampT	SampType: MS TestCode: EPA Method 8021B: Volatiles								
Client ID: TMW01	Batch	1D: <b>B6</b>	1481	R	RunNo: 6	1481				
Prep Date:	Analysis D	ate: 7/	18/2019	S	SeqNo: 20	084488	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	2.9	1.0	20.00	0	14.3	80	120			S
Toluene	3.5	1.0	20.00	0	17.6	80	120			S
Ethylbenzene	ND	1.0	20.00	0	1.50	80	120			S
Xylenes, Total	44	2.0	60.00	1.204	72.1	80	120			S
Surr: 4-Bromofluorobenzene	20		20.00		97.5	80	120			

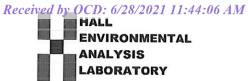
Sample ID: 1907883-001AMSI	<b>D</b> SampT	уре: МS	SD	TestCode: EPA Method 8021B: Volatiles								
Client ID: TMW01	Batch	ID: <b>B6</b>	1481	F	RunNo: 6	1481						
Prep Date:	Analysis D	ate: <b>7/</b>	18/2019	S	SeqNo: 2	084489	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	2.8	1.0	20.00	0	13.9	80	120	2.54	20	S		
Toluene	3.4	1.0	20.00	0	17.0	80	120	3.31	20	S		
Ethylbenzene	ND	1.0	20.00	0	1.40	80	120	0	20	S		
Xylenes, Total	43	2.0	60.00	1.204	69.4	80	120	3.80	20	S		
Surr: 4-Bromofluorobenzene	19		20.00		96.0	80	120	0	0			

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 3



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

		ber: 1907883	RcptNo: 1				
Received By: Desiree Dominguez	7/18/2019 8:05:00	АМ	D3				
Completed By: Anne Thorne	7/18/2019 8:39:43	АМ	ann A.				
Reviewed By: DAD 7/18/19			Cana Ji				
Chain of Custody							
s Chain of Custody complete?		Yes 🗸	No 🗌	Not Present			
. How was the sample delivered?		Courier					
<u>Log In</u>							
Was an attempt made to cool the sample	es?	Yes 🗸	No 🗌	NA $\square$			
. Were all samples received at a temperat	ure of >0° C to 6.0°C	Yes 🗸	No 🗌	NA $\square$			
Sample(s) in proper container(s)?		Yes 🗸	No 🗌				
Sufficient sample volume for indicated te	st(s)?	Yes 🗸	No 🗌				
. Are samples (except VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌				
. Was preservative added to bottles?		Yes	No 🗸	NA $\square$			
. VOA vials have zero headspace?		Yes 🗸	No 🗌	No VOA Vials			
). Were any sample containers received br	oken?	Yes	No 🗸	# of preserved			
. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	bottles checked for pH: (<2 or>	12 unless noted)		
Are matrices correctly identified on Chain	of Custody?	Yes 🗸	No 🗌	Adjusted?			
ls it clear what analyses were requested?		Yes 🗸	No 🗌	/ T.	1. 17/10 . /		
Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗸	No 🗆	Checked by:	JH 1/18/19		
ecial Handling (if applicable)							
. Was client notified of all discrepancies w	th this order?	Yes	No 🗌	NA 🗸			
Person Notified:	Date			1 8 ,			
By Whom:	Via:	eMail F	hone  Fax	☐ In Person			
Regarding:							
Client Instructions:							
S. Additional remarks:		· La					
Cooler Information							
Cooler No Temp °C Condition	Seal Intact Seal No	Seal Date	Signed By				

Recei	ved by	y 00	CD: 6	/28/2	2021	11.	:44:06	1M										-					Τ	P	age 90	of 129
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						(1	.508) s	amt /	BE	ΤM	8TEX <sup>3</sup>	)×	×	>	×	×							Rem			possib
1 day TAT	7/19/				(d)			oN 🗆		-0.1=0.82	1907 883	192	202	5003	100	245							Date Time	7/11/19 1452	Date Time 7/18/19 8:05	This serves as n
Time:	d 🛱 Rush		ral H-31			ager:	Brooke Herb	Fric Carroll	-	Cooler Temp(including CF): 0.9	Preservative Type	Hc/				7							Via:	age of	Via: Courier	accredited laboratories
Turn-Around Time:	☐ Standard	Project Name:	Latera	Project #:		Project Manager:	Broom	Sampler: F. On Ice:	# of Coolers:	Cooler Temp	Container Type and #	3 1/04				>]		ams,				5	Received by:	->	Received by:	contracted to other a
Chain-of-Custody Record	Harvest Four Corners	H	SS: 1755 Alroyo Dr.	Bloomfield, NM 87413	505-632-4475	Khong Chowesimidstream. com	e: Level 4 (Full Validation)	☐ Az Compliance ☐ Other			Matrix Sample Name	when BHOT TIMMOI	1 BHOS TIMMOS	BHAS TWWOS	BH04	8HOS TIMMOS	174/07/31	As not Joshua Ad,	-				Relinquished by:	Elle laral	Relinquished by:	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories.
Chair		Kijan	Mailing Address:	B		email or Fax#:	QA/QC Package: Standard	Accreditation:	EDD (Type)		Time	9 1145	1300	BIS	1330	1395							Time:		ate: Time:	If necessar
Dalam	Client:	7	Mailir	1/	Phone #:	email	QA/Q(	Accre	⊠ E		Date	7/19/19	~			>							Date:	MANA	Date:	



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

July 31, 2019

Josh Adams

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 21 OrderNo.: 1907C39

#### Dear Josh Adams:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/24/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 25, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

# Analytical Report Lab Order 1907C39

Date Reported: 7/31/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW-06

 Project:
 Lateral H 21
 Collection Date: 7/23/2019 12:30:00 PM

 Lab ID:
 1907C39-001
 Matrix: AQUEOUS
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: RAA
Benzene	ND	1.0	μg/L	1	7/24/2019 2:50:00 PM	R61627
Toluene	ND	1.0	μg/L	1	7/24/2019 2:50:00 PM	R61627
Ethylbenzene	ND	1.0	μg/L	1	7/24/2019 2:50:00 PM	R61627
Xylenes, Total	ND	1.5	μg/L	1	7/24/2019 2:50:00 PM	R61627
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	7/24/2019 2:50:00 PM	R61627
Surr: 4-Bromofluorobenzene	96.4	70-130	%Rec	1	7/24/2019 2:50:00 PM	R61627
Surr: Dibromofluoromethane	97.0	70-130	%Rec	1	7/24/2019 2:50:00 PM	R61627
Surr: Toluene-d8	96.9	70-130	%Rec	1	7/24/2019 2:50:00 PM	R61627

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Analytical Report
Lab Order 1907C39

Date Reported: 7/31/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW-07

 Project:
 Lateral H 21
 Collection Date: 7/23/2019 1:00:00 PM

 Lab ID:
 1907C39-002
 Matrix: AQUEOUS
 Received Date: 7/24/2019 11:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: RAA
Benzene	ND	1.0	μg/L	1	7/24/2019 3:15:00 PM	R61627
Toluene	ND	1.0	μg/L	1	7/24/2019 3:15:00 PM	R61627
Ethylbenzene	ND	1.0	μg/L	1	7/24/2019 3:15:00 PM	R61627
Xylenes, Total	ND	1.5	μg/L	1	7/24/2019 3:15:00 PM	R61627
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	7/24/2019 3:15:00 PM	R61627
Surr: 4-Bromofluorobenzene	96.9	70-130	%Rec	1	7/24/2019 3:15:00 PM	R61627
Surr: Dibromofluoromethane	99.1	70-130	%Rec	1	7/24/2019 3:15:00 PM	R61627
Surr: Toluene-d8	98.0	70-130	%Rec	1	7/24/2019 3:15:00 PM	R61627

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1907C39** 

31-Jul-19

Client: Harvest
Project: Lateral H 21

Sample ID: 100ng Ics	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8260: Volatiles Short List							
Client ID: LCSW	Batch	n ID: <b>R6</b>	1627	F	RunNo: 6	1627					
Prep Date:	Analysis D	ate: <b>7/</b> 2	24/2019	5	SeqNo: 20	088804	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	18	1.0	20.00	0	89.1	70	130				
Toluene	20	1.0	20.00	0	98.2	70	130				
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130				
Surr: 4-Bromofluorobenzene	9.8		10.00		98.4	70	130				
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130				
Surr: Toluene-d8	9.8		10.00		98.3	70	130				

Sample ID: rb	SampT	ype: ME	MBLK TestCode: EPA Method 8260: Volatiles Short List									
Client ID: PBW	Batch	1D: <b>R6</b>	1627	F	RunNo: 6	1627						
Prep Date:	Analysis D	ate: 7/	24/2019	8	SeqNo: <b>2088805</b> U							
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	9.7		10.00		96.9	70	130					
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130					
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130					
Surr: Toluene-d8	9.8		10.00		98.1	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 Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 3



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	Order Num	nber: 190	7C39			RcptNo: 1			
Received By:	Leah Bac	a	7/24/20	19 11:15:0	0 AM		Lash	Baca	4	
Completed By:	Erin Mele	ndrez	7/24/20	19 11:31:3	3 AM		Lab	11	, -	
Reviewed By:	Lo		7/24	14						
Chain of Cus	stody									
1. Is Chain of C	ustody comp	lete?			Yes	<b>V</b>	No		Not Present	
2. How was the	sample deliv	ered?			Cou	ırier				
Log In										
3. Was an atten	npt made to o	cool the samp	oles?		Yes	$\checkmark$	No		NA $\square$	
4. Were all sam	ples received	at a tempera	ature of >0° C	to 6.0°C	Yes	<b>✓</b>	No		NA 🗆	
5. Sample(s) in	proper conta	iner(s)?			Yes	<b>✓</b>	No			
6. Sufficient sam	nple volume f	or indicated t	est(s)?		Yes	<b>V</b>	No			
7. Are samples (	except VOA	and ONG) pr	operly preserve	ed?	Yes	<b>V</b>	No			
8. Was preserva	tive added to	bottles?			Yes		No	<b>✓</b>	NA 🗆	
9. VOA vials hav	e zero heads	space?			Yes	<b>✓</b>	No		No VOA Vials	
10. Were any sar	nple containe	ers received b	oroken?		Yes		No	<b>V</b>	# of preserved	
11. Does paperwo	ork match bot	tle labels?			Yes	<b>V</b>	No		bottles checked for pH:	
(Note discrepa			<b>()</b>						(<2 or >	12 unless noted)
12. Are matrices of					Yes		No		Adjusted?	
13. Is it clear wha	5	10.3%	1?		Yes	<b>V</b>	No		Dr	0 7/11/1
14. Were all holdi (If no, notify c			)		Yes	<b>V</b>	No		Checked by: VF	40 7/24/19
Special Handl	ing (if app	olicable)								
15. Was client no			with this order?	>	Yes		No		NA 🗹	
Person	Notified:	_		Date	: [	NAME OF TAXABLE PARTY.		weenesse,		
By Who	om:			Via:	eN	ail 🗌	Phone	Fax	☐ In Person	
Regard	ing:				Water School Control					
Client I	nstructions:							*********		
16. Additional re	marks:									
17. Cooler Infor	mation									
Cooler No	of distribution contracts	Condition	Seal Intact	Seal No	Seal D	ate	Signed E	Зу		
1	4.6	Good	Not Present							

Received	d by	<i>0C</i>	D: 6/	/28/2	021	11:4	44:06	1 <i>M</i>													Pa	ige 96 o <sub>j</sub>	f 129
HALL ENVIRONMENTAL	ANALYSIS LABORATORY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	505-345-3975 Fax 505-345-4107	Analysis		PO <sub>4</sub> , S	. 827(	o 0 ole sle	tea teM th teM th te te te te te te te te te te te te te	EDB (Ma PAHs b) RCRA 8 S260 (Ve B270 (Se Total Co										c Jadam s@Ltenv. Com	Tshort @ Lten V. com	ontracted data will be clearly notated on the analytical report.
			)1 Ha				bcB <sub>i</sub> s				99 1808	-											ny sub-
			490	Tel.							108:H9T										Remarks		sibility. A
Time: 7/25	□ Standard X Rush 24 hou	Project Name:	Lateral H-21	77001 Project #:	2606/5060		Josh Adorns	Tradis Short	Un Ice: N Yes No	(including CF): 46-60 = 46C	Container Preservative HEAL No X X Type and # Type	HCL -201	3) VOAS HCL		dams.						Via: Date Time  1/23/19 1500	Received by: Via: Course Date Time  **More Than 1115	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.
-Custod	Harvest Four Corners	Kisun Hong	Mailing Address: Horvest Midstream	. ×		email or Fax#: Kish Mong @ Williams, Com	QA/QC Package:	:: 	□ NELAC □ Other□□ FDD (Type)		Date Time Matrix Sample Name	, 6U	7/3 1300 GW 84-07-TMW-DT	$\overline{}$	As per-Jóshua Ac	÷			2		Time:	Date: Time: Reinquished by:	If necessary, samples submitted to Hall Environmental may be sub



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

July 31, 2019

**Brooke Herb** 

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413

TEL: (505) 632-4475

FAX

RE: Lateral H 21 OrderNo.: 1907D53

#### Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/26/2019 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 29, 2019.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

# **Analytical Report**Lab Order **1907D53**

Date Reported: 7/31/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW08

 Project:
 Lateral H 21
 Collection Date: 7/25/2019 2:30:00 PM

 Lab ID:
 1907D53-001
 Matrix: GROUNDWA
 Received Date: 7/26/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	2.2	2.0	D	μg/L	2	7/26/2019 1:28:14 PM	W61677
Toluene	ND	2.0	D	μg/L	2	7/26/2019 1:28:14 PM	W61677
Ethylbenzene	ND	2.0	D	μg/L	2	7/26/2019 1:28:14 PM	W61677
Xylenes, Total	ND	4.0	D	μg/L	2	7/26/2019 1:28:14 PM	W61677
Surr: 4-Bromofluorobenzene	92.2	80-120	D	%Rec	2	7/26/2019 1:28:14 PM	W61677

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

### Hall Environmental Analysis Laboratory, Inc.

WO#: 1907D53

31-Jul-19

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

Prep Date:

Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBW Batch ID: W61677 RunNo: 61677 Analysis Date: 7/26/2019

SeqNo: 2091159 Units: µg/L Qual

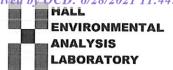
Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Result Benzene ND 1.0 Toluene ND 1.0 Ethylbenzene ND 1.0 Xylenes, Total ND 2.0 19 20.00 93.6 80 120 Surr: 4-Bromofluorobenzene

Sample ID: 100NG BTEX LCS	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSW	Batch	n ID: We	61677	F	RunNo: 6	1677						
Prep Date:	Analysis D	ate: <b>7/</b>	26/2019	\$	SeqNo: 2	091160	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	19	1.0	20.00	0	94.1	80	120					
Toluene	20	1.0	20.00	0	100	80	120					
Ethylbenzene	20	1.0	20.00	0	102	80	120					
Xylenes, Total	61	2.0	60.00	0	102	80	120					
Surr: 4-Bromofluorobenzene	19		20.00		94.9	80	120					

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- 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

EL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Harvest	Work	Order Number: 19	07D53		RcptNo:	1
Received By: Anne 1	Thorne 7/26/20	19 8:00:00 AM		anne An	~	
Completed By: Anne 1	Thorne 7/26/20	19 9:13:32 AM		Arne Ha		
Reviewed By: DAD	1/26/19			ana gra		
Chain of Custody						
1. Is Chain of Custody co	mplete?	Ye	s 🗸	No 🗌	Not Present	
2. How was the sample d	elivered?	Cli	<u>ent</u>			
<u>Log In</u>						
3. Was an attempt made	to cool the samples?	Ye	s 🗸	No 🗌	NA $\square$	
4. Were all samples receive	ved at a temperature of >0° C t	o 6.0°C Ye	s 🗸	No 🗌	NA $\square$	
5. Sample(s) in proper con	ntainer(s)?	Ye	s <b>V</b>	No 🗌		
6. Sufficient sample volum	e for indicated test(s)?	Yes	· 🗸	No 🗆		
	OA and ONG) properly preserve			No 🗌		
8. Was preservative added		Yes	s 🗆	No 🗸	NA 🗆	119
9. VOA vials have zero he	adspace?	Yes	, <b>v</b>	No 🗌	No VOA Vials	2/2/19
10. Were any sample conta	niners received broken?	Ye	s $\square$	No 🗸	# of preserved	
11 Daga paparuadi matah	halla labala			No. 🗆	bottles checked	
<ol> <li>Does paperwork match (Note discrepancies on</li> </ol>		Yes	· 🗸	No 🗆	for pH: (<2 or	>12 unless noted)
12. Are matrices correctly in	lentified on Chain of Custody?	Yes	<b>✓</b>	No 🗌	Adjusted?	
13. Is it clear what analyses	were requested?	Yes	<b>V</b>	No 🗌		
<ol> <li>Were all holding times a (If no, notify customer for</li> </ol>		Yes	<b>V</b>	No 🗆 🍃	Checked by:	
Special Handling (if a	pplicable)					
15. Was client notified of al	I discrepancies with this order?	Ye	s 🗆	No 🗌	NA 🗹	
Person Notified:		Date	Z	L.		
By Whom:		Via: el	∕lail 🔲	Phone Fax	In Person	
Regarding:						
Client Instructions	: [					
16. Additional remarks:						
17. Cooler Information						
Cooler No Temp		Seal No Seal I	Date	Signed By		
1 1.6	Good Yes					

Chain-of-Custody Record	Turn-Around Time:						Reco
Client: Acres Micheller	The state of the s		HALL	V-100	RON	ENVIRONMENTAL	vived -
	`		ANAL	YSIST	LABC	ABORATOR	by €
Mailing Address: 727			www.hal	www.hallenvironmental.com	ental.com		OCD.
15) ANOYOU	12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	4901 H	4901 Hawkins NE -	Albuquerque, NM 87109	que, NM 8	17109	: 6/2
_	Project #:	Tel. 50	505-345-3975	Fax 50	Fax 505-345-4107	07	28/2
Phone #: 505-632 -4475			ď	Analysis Re	Request		021
email or Fax#: Khong@ harusst midstream.com Project Manager:				†O	(11		11:
QA/QC Package:   □ Standard □ Level 4 (Full Validation)	Brook Herb	PCB's ○ / MR( • (802)	SWIS	S '⁵Od	iəsdA\t		44:06
Accreditation:   Az Compliance	Sampler:	ם		O <sup>5</sup> '	uəse		1 <i>M</i>
	✓ Yes □ No	/ 08	3 10				
□ EDD (Type)	0	4Đ)	018	(			
	Cooler Temp(including cF): $i > +O_c/G = ic$	12D	58 yo	AOV			
Data Timo Matrix Sample Name	Preservative Id AT No.	08:Hd	OB (W	) 'E' E		,	
1430 (512)	-	1	Ы	38			
SOMUL SOMUL							
15/10/21							
As per Joshna	Hems.						
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			10 to				
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14 Leto beinguished by:	Notable Mate Time	Remarks: $\mathcal{CC}$	bherbelton	Jour.c	room.		Pa
Date: Time: Relinquishet by:	Received by: Via: Date Time	1	Jadams	O)		Inc.	ge 10.
necessary, samples submitted to H.	contracted to other accredited laboratories. This serves as notice of this possibility.	ossibility. Any sub	12 to Same Reg 141 pg Jush F Any sub-contracted data will be clearly notated on the analytical report.	ill be clearly not	tated on the a	h y l	of 1
							29



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

August 19, 2020

Kijun Hong

Harvest

1755 Arroyo Dr.

Bloomfield, NM 87413 TEL: (505) 632-4475

FAX

RE: Lateral H 21 OrderNo.: 2008431

### Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/8/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW01

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 11:30:00 AM

 Lab ID:
 2008431-001
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	3.3	1.0	Р	μg/L	1	8/17/2020 3:04:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 3:04:00 PM	SL71123
Ethylbenzene	6.0	1.0	Р	μg/L	1	8/17/2020 3:04:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Ρ	μg/L	1	8/17/2020 3:04:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Ρ	μg/L	1	8/17/2020 3:04:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Ρ	μg/L	1	8/17/2020 3:04:00 PM	SL71123
Xylenes, Total	ND	1.5	Р	μg/L	1	8/17/2020 3:04:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	93.6	70-130	Р	%Rec	1	8/17/2020 3:04:00 PM	SL71123
Surr: 4-Bromofluorobenzene	94.2	70-130	Р	%Rec	1	8/17/2020 3:04:00 PM	SL71123
Surr: Dibromofluoromethane	96.5	70-130	Р	%Rec	1	8/17/2020 3:04:00 PM	SL71123
Surr: Toluene-d8	103	70-130	Р	%Rec	1	8/17/2020 3:04:00 PM	SL71123

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW03

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 12:30:00 PM

 Lab ID:
 2008431-002
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	16	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
Ethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
Xylenes, Total	ND	1.5	Р	μg/L	1	8/17/2020 4:16:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	96.4	70-130	Р	%Rec	1	8/17/2020 4:16:00 PM	SL71123
Surr: 4-Bromofluorobenzene	92.9	70-130	Р	%Rec	1	8/17/2020 4:16:00 PM	SL71123
Surr: Dibromofluoromethane	99.7	70-130	Р	%Rec	1	8/17/2020 4:16:00 PM	SL71123
Surr: Toluene-d8	99.9	70-130	Р	%Rec	1	8/17/2020 4:16:00 PM	SL71123

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW04

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 12:50:00 PM

 Lab ID:
 2008431-003
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
Ethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
Xylenes, Total	ND	1.5	Р	μg/L	1	8/17/2020 4:40:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	94.7	70-130	Р	%Rec	1	8/17/2020 4:40:00 PM	SL71123
Surr: 4-Bromofluorobenzene	93.6	70-130	Р	%Rec	1	8/17/2020 4:40:00 PM	SL71123
Surr: Dibromofluoromethane	97.9	70-130	Р	%Rec	1	8/17/2020 4:40:00 PM	SL71123
Surr: Toluene-d8	101	70-130	Р	%Rec	1	8/17/2020 4:40:00 PM	SL71123

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 10

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW07

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 1:20:00 PM

 Lab ID:
 2008431-004
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	ND	1.0	Р	μg/L	1	8/17/2020 5:04:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 5:04:00 PM	SL71123
Ethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 5:04:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Р	μg/L	1	8/17/2020 5:04:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Ρ	μg/L	1	8/17/2020 5:04:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Ρ	μg/L	1	8/17/2020 5:04:00 PM	SL71123
Xylenes, Total	ND	1.5	Ρ	μg/L	1	8/17/2020 5:04:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	92.4	70-130	Ρ	%Rec	1	8/17/2020 5:04:00 PM	SL71123
Surr: 4-Bromofluorobenzene	93.7	70-130	Ρ	%Rec	1	8/17/2020 5:04:00 PM	SL71123
Surr: Dibromofluoromethane	97.7	70-130	Ρ	%Rec	1	8/17/2020 5:04:00 PM	SL71123
Surr: Toluene-d8	102	70-130	Р	%Rec	1	8/17/2020 5:04:00 PM	SL71123

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 10

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW08

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 1:50:00 PM

 Lab ID:
 2008431-005
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
Toluene	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
Ethylbenzene	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	8/17/2020 5:28:00 PM	SL71123
Xylenes, Total	ND	1.5	μg/L	1	8/17/2020 5:28:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	93.9	70-130	%Rec	1	8/17/2020 5:28:00 PM	SL71123
Surr: 4-Bromofluorobenzene	93.6	70-130	%Rec	1	8/17/2020 5:28:00 PM	SL71123
Surr: Dibromofluoromethane	99.3	70-130	%Rec	1	8/17/2020 5:28:00 PM	SL71123
Surr: Toluene-d8	99.9	70-130	%Rec	1	8/17/2020 5:28:00 PM	SL71123

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 10

Date Reported: 8/19/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW06

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 2:15:00 PM

 Lab ID:
 2008431-006
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
Ethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
Xylenes, Total	ND	1.5	Р	μg/L	1	8/17/2020 5:52:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	95.9	70-130	Р	%Rec	1	8/17/2020 5:52:00 PM	SL71123
Surr: 4-Bromofluorobenzene	94.4	70-130	Р	%Rec	1	8/17/2020 5:52:00 PM	SL71123
Surr: Dibromofluoromethane	98.8	70-130	Р	%Rec	1	8/17/2020 5:52:00 PM	SL71123
Surr: Toluene-d8	101	70-130	Р	%Rec	1	8/17/2020 5:52:00 PM	SL71123

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 10

# Analytical Report Lab Order 2008431

Date Reported: 8/19/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW02

 Project:
 Lateral H 21
 Collection Date: 8/7/2020 2:50:00 PM

 Lab ID:
 2008431-007
 Matrix: GROUNDWA
 Received Date: 8/8/2020 9:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: CCM
Benzene	8.5	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
Toluene	ND	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
Ethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
Xylenes, Total	ND	1.5	Р	μg/L	1	8/17/2020 6:16:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	95.3	70-130	Р	%Rec	1	8/17/2020 6:16:00 PM	SL71123
Surr: 4-Bromofluorobenzene	94.2	70-130	Р	%Rec	1	8/17/2020 6:16:00 PM	SL71123
Surr: Dibromofluoromethane	98.4	70-130	Р	%Rec	1	8/17/2020 6:16:00 PM	SL71123
Surr: Toluene-d8	102	70-130	Р	%Rec	1	8/17/2020 6:16:00 PM	SL71123

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 10

# Analytical Report Lab Order 2008431

Date Reported: 8/19/2020

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: Trip Blank

**Project:** Lateral H 21 Collection Date:

**Lab ID:** 2008431-008 **Matrix:** GROUNDWA **Received Date:** 8/8/2020 9:20:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: CCM
Benzene	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
Toluene	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
Ethylbenzene	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
Methyl tert-butyl ether (MTBE)	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
1,2,4-Trimethylbenzene	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
1,3,5-Trimethylbenzene	ND	1.0	μg/L	1	8/17/2020 6:41:00 PM	SL71123
Xylenes, Total	ND	1.5	μg/L	1	8/17/2020 6:41:00 PM	SL71123
Surr: 1,2-Dichloroethane-d4	94.1	70-130	%Rec	1	8/17/2020 6:41:00 PM	SL71123
Surr: 4-Bromofluorobenzene	93.7	70-130	%Rec	1	8/17/2020 6:41:00 PM	SL71123
Surr: Dibromofluoromethane	96.0	70-130	%Rec	1	8/17/2020 6:41:00 PM	SL71123
Surr: Toluene-d8	101	70-130	%Rec	1	8/17/2020 6:41:00 PM	SL71123

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2008431** 

19-Aug-20

Client: Harvest
Project: Lateral H 21

Sample ID: 100ng lcs	SampType: LCS TestCode: EPA Method 8260: Volatiles Short List										
Client ID: LCSW	Batch	n ID: SL	71123	F	RunNo: <b>7</b>	1123					
Prep Date:	Analysis D	ate: <b>8/</b>	17/2020	S	Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	19	1.0	20.00	0	95.2	70	130				
Toluene	20	1.0	20.00	0	102	70	130				
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130				
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130				
Surr: Dibromofluoromethane	9.8		10.00		97.6	70	130				
Surr: Toluene-d8	10		10.00		102	70	130				

Sample ID: MB	SampT	уре: МЕ	BLK	TestCode: EPA Method 8260: Volatiles Short List									TestCode: EPA Method 8260: Volatiles Short List								
Client ID: PBW	Batcl	n ID: SL	71123	F	RunNo: <b>7</b>	1123															
Prep Date:	Analysis D	ate: 8/	17/2020	S	SeqNo: 2	482258	Units: µg/L														
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	9.5		10.00		95.4	70	130														
Surr: 4-Bromofluorobenzene	9.5		10.00		94.5	70	130														
Surr: Dibromofluoromethane	9.9		10.00		98.8	70	130														
Surr: Toluene-d8	10		10.00		102	70	130														

Sample ID: 2008431-001ams	SampT	SampType: MS TestCode: EPA Method 8260: Volatiles Short List										
Client ID: TMW01	Batch	ID: SL	71123	F	RunNo: <b>7</b>	1123						
Prep Date:	Analysis D	ate: 8/	17/2020	SeqNo: <b>2482262</b> Units: μg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	22	1.0	20.00	3.252	92.7	70	130					
Toluene	21	1.0	20.00	0	103	70	130					
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.3	70	130					
Surr: 4-Bromofluorobenzene	9.4		10.00		93.6	70	130					
Surr: Dibromofluoromethane	9.8		10.00		97.8	70	130					
Surr: Toluene-d8	10		10.00		101	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 Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 10

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2008431 19-Aug-20** 

Client: Harvest
Project: Lateral H 21

Sample ID: 2008431-001amsd	SampT	ype: MS	SD	TestCode: EPA Method 8260: Volatiles Short List									
Client ID: TMW01	Batch	ID: SL	71123	F									
Prep Date: Analysis Date: 8/17/2020 SeqNo: 2482263 Units: µg/L													
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	21	1.0	20.00	3.252	89.8	70	130	2.66	20				
Toluene	20	1.0	20.00	0	102	70	130	1.51	20				
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.9	70	130	0	0				
Surr: 4-Bromofluorobenzene	9.4		10.00		93.5	70	130	0	0				
Surr: Dibromofluoromethane	9.6		10.00		96.5	70	130	0	0				
Surr: Toluene-d8	10		10.00	101 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 Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 10



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: 2008431 RcptNo: 1 Inox Received By: Isaiah Ortiz 8/8/2020 9:20:00 AM I-04 Completed By: Isaiah Ortiz 8/8/2020 9:56:31 AM Reviewed By: DAD 8/10/20 Chain of Custody No 🗌 1. Is Chain of Custody complete? Yes 🗸 Not Present 2. How was the sample delivered? Courier 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 No 🗌 NA 🗌 Yes 🗸 5. Sample(s) in proper container(s)? No 🗌 Yes 🗸 6. Sufficient sample volume for indicated test(s)? Yes 🗸 No 🗌 Yes 🗸 No 🗌 7. Are samples (except VOA and ONG) properly preserved? No 🗸 NA 🗌 8. Was preservative added to bottles? Yes 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes 🗸 No 🗌 NA 🗌 Yes 🗌 No 🗸 10. Were any sample containers received broken? # of preserved bottles checked 11. Does paperwork match bottle labels? Yes 🗸 No 🗌 for pH: (<2 or >12 unless noted) (Note discrepancies on chain of custody) 12. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗌 Yes 🗸 No 🗌 13. Is it clear what analyses were requested? Checked by: 20 8/10/20 14. Were all holding times able to be met? No 🗌 Yes 🗸 (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No 🗌 NA 🗸 Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1.4 Good Not Present

HALL ENVIRONMENTAL		www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	505-345-3975 Fax 505-345-4107	Analysis Request	<sup>†</sup> OS	SMISO,	(1.40 728 10 SON	10 of 50 of 10 of	etho y 83 Me r, <i>h</i> (AO)	8081 Pe PAHs by CI, F, B 8250 (Vi Total Co											Please CC/ Bherb@ Ltenvicon	Via: Date Time TSh CA CLICAL. COM COUNTY 8 8 10 09 20
Turn-Around Time:	Standard □ Rush	Project Name:	Lateral H-21 4901	Project #: Tel.		(0)	Help (805	COVIS Short	) ( 38	(including OF): 1.4 ± 0 (CF) 1.4.5	4 %. 4 %. BTEX / TPH:801	HC.		X  E 000	XHOV		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	X 500	008			Received by: Via: Date Time Remarks:	Received by: Via: Date Time
Chain-of-Custody Record	Client: Harvest MidStream	Kiscs Head	W	Ł,	Phone #: 505 - 632 - 4175	email or Fax#: 14Mon a Chilly delth. delth. delth. Coly	QA/QC Package:	ו: ☐ Az Compliance:	C EDD (Type)		Date Time Matrix Sample Name	1130 GW TANDOL	50 WM 1 0521	1	To company	Philipson Long an		V MSO V TMWOZ	Trip Blank	01/01/8 MM		Date: Time: Relinquished by:	Refinquished by:



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

May 07, 2021

Monica Smith

Harvest 1755 Arroyo Dr.

Bloomfield, NM 87413 TEL: (505) 632-4475

FAX:

RE: Lateral H21 OrderNo.: 2104D17

#### Dear Monica Smith:

Hall Environmental Analysis Laboratory received 9 sample(s) on 4/30/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 01

 Project:
 Lateral H21
 Collection Date: 4/29/2021 12:10:00 PM

 Lab ID:
 2104D17-001
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	1.0	μg/L	1	5/4/2021 3:19:11 PM	B77139
Toluene	ND	1.0	μg/L	1	5/4/2021 3:19:11 PM	B77139
Ethylbenzene	ND	1.0	μg/L	1	5/4/2021 3:19:11 PM	B77139
Xylenes, Total	ND	2.0	μg/L	1	5/4/2021 3:19:11 PM	B77139
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	5/4/2021 3:19:11 PM	B77139

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 02

 Project:
 Lateral H21
 Collection Date: 4/29/2021 12:40:00 PM

 Lab ID:
 2104D17-002
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analys	: NSB
Benzene	ND	1.0	Р	μg/L	1	5/4/2021 3:42:59 PM	B77139
Toluene	ND	1.0	Р	μg/L	1	5/4/2021 3:42:59 PM	B77139
Ethylbenzene	ND	1.0	Р	μg/L	1	5/4/2021 3:42:59 PM	B77139
Xylenes, Total	ND	2.0	Р	μg/L	1	5/4/2021 3:42:59 PM	B77139
Surr: 4-Bromofluorobenzene	102	70-130	Р	%Rec	1	5/4/2021 3:42:59 PM	B77139

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 03

 Project:
 Lateral H21
 Collection Date: 4/29/2021 1:10:00 PM

 Lab ID:
 2104D17-003
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES					Analys	: NSB
Benzene	ND	1.0	μg/L	1	5/4/2021 4:06:41 PM	B77139
Toluene	ND	1.0	μg/L	1	5/4/2021 4:06:41 PM	B77139
Ethylbenzene	ND	1.0	μg/L	1	5/4/2021 4:06:41 PM	B77139
Xylenes, Total	ND	2.0	μg/L	1	5/4/2021 4:06:41 PM	B77139
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	5/4/2021 4:06:41 PM	B77139

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 3 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 04

 Project:
 Lateral H21
 Collection Date: 4/29/2021 12:55:00 PM

 Lab ID:
 2104D17-004
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analys	: NSB
Benzene	ND	1.0	Р	μg/L	1	5/4/2021 4:30:20 PM	B77139
Toluene	ND	1.0	Р	μg/L	1	5/4/2021 4:30:20 PM	B77139
Ethylbenzene	ND	1.0	Р	μg/L	1	5/4/2021 4:30:20 PM	B77139
Xylenes, Total	ND	2.0	Р	μg/L	1	5/4/2021 4:30:20 PM	B77139
Surr: 4-Bromofluorobenzene	103	70-130	Р	%Rec	1	5/4/2021 4:30:20 PM	B77139

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 06

 Project:
 Lateral H21
 Collection Date: 4/29/2021 12:15:00 PM

 Lab ID:
 2104D17-005
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: BRM
Benzene	ND	2.0	D	μg/L	2	5/6/2021 3:44:36 PM	B77212
Toluene	ND	2.0	D	μg/L	2	5/6/2021 3:44:36 PM	B77212
Ethylbenzene	ND	2.0	D	μg/L	2	5/6/2021 3:44:36 PM	B77212
Xylenes, Total	ND	3.0	D	μg/L	2	5/6/2021 3:44:36 PM	B77212
Surr: 1,2-Dichloroethane-d4	113	70-130	D	%Rec	2	5/6/2021 3:44:36 PM	B77212
Surr: 4-Bromofluorobenzene	101	70-130	D	%Rec	2	5/6/2021 3:44:36 PM	B77212
Surr: Dibromofluoromethane	102	70-130	D	%Rec	2	5/6/2021 3:44:36 PM	B77212
Surr: Toluene-d8	104	70-130	D	%Rec	2	5/6/2021 3:44:36 PM	B77212

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 07

**Project:** Lateral H21
 Collection Date: 4/29/2021 2:00:00 PM

 **Lab ID:** 2104D17-006
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: BRM
Benzene	ND	2.0	D	μg/L	2	5/6/2021 4:11:54 PM	B77212
Toluene	ND	2.0	D	μg/L	2	5/6/2021 4:11:54 PM	B77212
Ethylbenzene	ND	2.0	D	μg/L	2	5/6/2021 4:11:54 PM	B77212
Xylenes, Total	ND	3.0	D	μg/L	2	5/6/2021 4:11:54 PM	B77212
Surr: 1,2-Dichloroethane-d4	108	70-130	D	%Rec	2	5/6/2021 4:11:54 PM	B77212
Surr: 4-Bromofluorobenzene	101	70-130	D	%Rec	2	5/6/2021 4:11:54 PM	B77212
Surr: Dibromofluoromethane	103	70-130	D	%Rec	2	5/6/2021 4:11:54 PM	B77212
Surr: Toluene-d8	101	70-130	D	%Rec	2	5/6/2021 4:11:54 PM	B77212

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
  - E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 08

 Project:
 Lateral H21
 Collection Date: 4/29/2021 12:30:00 PM

 Lab ID:
 2104D17-007
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: BRM
Benzene	ND	2.0	D	μg/L	2	5/6/2021 4:39:02 PM	B77212
Toluene	ND	2.0	D	μg/L	2	5/6/2021 4:39:02 PM	B77212
Ethylbenzene	ND	2.0	D	μg/L	2	5/6/2021 4:39:02 PM	B77212
Xylenes, Total	ND	3.0	D	μg/L	2	5/6/2021 4:39:02 PM	B77212
Surr: 1,2-Dichloroethane-d4	112	70-130	D	%Rec	2	5/6/2021 4:39:02 PM	B77212
Surr: 4-Bromofluorobenzene	102	70-130	D	%Rec	2	5/6/2021 4:39:02 PM	B77212
Surr: Dibromofluoromethane	106	70-130	D	%Rec	2	5/6/2021 4:39:02 PM	B77212
Surr: Toluene-d8	102	70-130	D	%Rec	2	5/6/2021 4:39:02 PM	B77212

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 09

**Project:** Lateral H21
 Collection Date: 4/29/2021 2:10:00 PM

 **Lab ID:** 2104D17-008
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst	: BRM
Benzene	ND	2.0	D	μg/L	2	5/6/2021 2:50:12 PM	B77212
Toluene	ND	2.0	D	μg/L	2	5/6/2021 2:50:12 PM	B77212
Ethylbenzene	ND	2.0	D	μg/L	2	5/6/2021 2:50:12 PM	B77212
Xylenes, Total	ND	3.0	D	μg/L	2	5/6/2021 2:50:12 PM	B77212
Surr: 1,2-Dichloroethane-d4	107	70-130	D	%Rec	2	5/6/2021 2:50:12 PM	B77212
Surr: 4-Bromofluorobenzene	103	70-130	D	%Rec	2	5/6/2021 2:50:12 PM	B77212
Surr: Dibromofluoromethane	100	70-130	D	%Rec	2	5/6/2021 2:50:12 PM	B77212
Surr: Toluene-d8	103	70-130	D	%Rec	2	5/6/2021 2:50:12 PM	B77212

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 11

Date Reported: 5/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest Client Sample ID: TMW 10

 Project:
 Lateral H21
 Collection Date: 4/29/2021 2:15:00 PM

 Lab ID:
 2104D17-009
 Matrix: AQUEOUS
 Received Date: 4/30/2021 7:25:00 AM

Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST					Analyst	: BRM
Benzene	ND	1.0	μg/L	1	5/6/2021 5:06:14 PM	B77212
Toluene	ND	1.0	μg/L	1	5/6/2021 5:06:14 PM	B77212
Ethylbenzene	ND	1.0	μg/L	1	5/6/2021 5:06:14 PM	B77212
Xylenes, Total	ND	1.5	μg/L	1	5/6/2021 5:06:14 PM	B77212
Surr: 1,2-Dichloroethane-d4	116	70-130	%Rec	1	5/6/2021 5:06:14 PM	B77212
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	5/6/2021 5:06:14 PM	B77212
Surr: Dibromofluoromethane	110	70-130	%Rec	1	5/6/2021 5:06:14 PM	B77212
Surr: Toluene-d8	100	70-130	%Rec	1	5/6/2021 5:06:14 PM	B77212

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2104D17** 

07-May-21

Client: Harvest
Project: Lateral H21

Sample ID: mb	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	d 8021B: Volatiles								
Client ID: PBW	Batcl	n ID: <b>B7</b>	7139	RunNo: 77139											
Prep Date:	5	SeqNo: 2	735291	Units: µg/L											
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	20		20.00		100	70	130								

Sample ID: 100ng btex Ics	Sampl	ype: <b>LC</b>	S	Tes	tCode: El	d 8021B: Volatiles							
Client ID: LCSW	Batcl	n ID: <b>B7</b>	7139	F	RunNo: <b>7</b>	7139							
Prep Date:	Analysis D	Date: 5/	4/2021	\$	SeqNo: 2	735292	Units: µg/L						
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	21	1.0	20.00	0	103	80	120						
Ethylbenzene	20	1.0	20.00	0	101	80	120						
Xylenes, Total	61	2.0	60.00	0	101	80	120						
Surr: 4-Bromofluorobenzene	20		20.00		101	70	130						

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 11

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2104D17** 

07-May-21

Client: Harvest
Project: Lateral H21

Sample ID: 100ng lcs	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8260: Volatile	es Short L	ist	
Client ID: LCSW	Batch	n ID: <b>B7</b>	7212	F	RunNo: <b>7</b>	7212				
Prep Date:	Analysis D	ate: <b>5/</b> 9	6/2021	9	SeqNo: 2	737949	Units: µg/L			
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	95.4	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

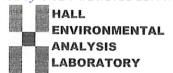
Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260: Volatile	s Short L	.ist	
Client ID: PBW	Batch	1D: <b>B7</b>	7212	F	7212					
Prep Date:	Analysis D	ate: <b>5/</b> 9	6/2021	8	SeqNo: 2	737955	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.5	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		101	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 11



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	2104D1	7	RcptNo	p: 1
Received By: Juan Rojas	4/30/2021 7:25:00 AM		Hearing	7	
Completed By: Desiree Dominguez	4/30/2021 8:51:00 AM		Junean &		
Reviewed By: IR 4130/21			112		
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the samples?		Yes 🗸	No 🗌	NA 🗌	
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 p	preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗸	NA 🗆	
9. Received at least 1 vial with headspace <1/4" fo	or AQ VOA?	Yes 🗸	No 🗌	NA 🗌	
10. Were any sample containers received broken?		Yes	No 🗸		
				# of preserved bottles checked	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🗌	for pH:	or >12 unless noted)
2. Are matrices correctly identified on Chain of Cu	stody?	Yes 🗸	No 🗌	Adjusted?	
3. Is it clear what analyses were requested?		Yes 🗸	No 🗆		
4. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗸	No 🗌	Checked by:	lu 4/30/2
Special Handling (if applicable)					
15. Was client notified of all discrepancies with this	s order?	Yes	No 🗌	NA 🗸	
Person Notified:	Date:	NETT REPORTED TO SERVICE MODES	And the removement of the second		
By Whom:	Via:	eMail	Phone Fax	In Person	
Regarding:				ALTO DESCRIPTION OF THE PROPERTY OF THE PROPER	
Client Instructions:	WAY A PROGRESS OF THE PROGRESS WERE SECURITY TO THE		STATUTE LENGTH THE OF THE PROPERTY OF THE PROP		
16. Additional remarks:					
17. Cooler Information					
	Intact Seal No S	eal Date	Signed By		
1 0.1 Good Yes					

HALL ENVIRONMENTAL ANALYSIS LABORATORY www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107	Analysis Request			resei	/O/	-imə6	7) 07S8 (9) 07S8 (1) Total C														128 of	
HALL ENVIRON ANALYSIS LABC www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 8 Tel. 505-345-3975 Fax 505-345-41	Analysi	S	bcB.	S808\ (1.4( 7S8 1	ides, 10 o 10 o tals	estic	TPH:80 ROB1 P ROB1 P ROB2 P RO												Remarks:	Plase 11. 0		vility. Any sub-contracted data will be cle
			V 5/2	BMT.		· (-0 = 0 · ( °C) ¥	2104DIZ	× 100-	- 003	- 003	h00-	- 005	- 000	7007	-008	→ 600-			Time	2/62	Date Time	s. This serves as notice of this possibi
Turn-Around Time:  以 Standard □ Rush Project Name:  しったモベロ ・ H 2 / Project #:		ger:	Brooke Herb - W	Sampler: E. C. Curve II	# of Coolers: /	Cooler Temp(including CF):	Container Preservative Type and # Type	3 roa HC1	-							<i>&gt;)</i>			Received by: Via:	3	Received by: Via:	acted to other accredited laboratories
Sustody Record		Monica Scadoval Pr	☐ Level 4 (Full Validation)	npliance		O	Sample Name	TMWOI	TMWOZ	TMW 03	TM WOY	TMW OG	TMW 07	7MW 08	7 MW 09	TMWIO			Relinquished by:	word	Relinquished by:	to Hall Environr
Client: Harvest	#:	i	r achage. Idard		ype)		Time Matrix	10:16 GW	12:40 GW	13:10	(3:55	12:15	14:00	12:30	01:41	14:15				0	Time: Relinqui	f necessary, samples
Clien	# Bhone #:	email or Fax#:	Standard Standard	Accreditation: 这			Date	4/29								Ħ		- 1		60/15	Upg/2	<u></u>

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

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 34046

#### **CONDITIONS**

Operator:	OGRID:
Harvest Four Corners, LLC	373888
1111 Travis Street	Action Number:
Houston, TX 77002	34046
	Action Type:
	[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

#### CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of the Revised Stage 1 Abatement Plan & Proposed Public Notice and Participation: Content satisfactory 1. OCD approves this current revised Stage 1 Abatement Plan & Proposed Public Notice and Participation 2. Continue quarterly groundwater monitoring until eight consecutive quarters of compliance with NMWQCC standards is achieved in lieu of submitting a Stage 2 Abatement Plan 3. If contaminant concentrations rebound and exceed NMWQCC standards, a Stage 2 Abatement Plan per NMAC 19.15.30 remediation alternative must be completed 4. OCD approves the public notice and participation draft associated with a Stage 1 Abatement Plan to address groundwater impacts identified at the Lateral H-21 pipeline release per 19.15.30.15 NMAC 5. Submit the Annual Monitoring Report to the OCD no later than March 31, 2022	1/3/2022