Page 3

Incident ID	nAPP2302639601
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Received by OCD: 4/3/202							
Form C-141	State of New Mexico			Incident ID	nAPP2302639601		
Page 4	Oil Conservation Division			District RP			
				Facility ID			
				Application ID			
regulations all operators are public health or the environ failed to adequately investig addition, OCD acceptance of and/or regulations. Printed Name: <u>Heather</u> Signature: <u>Hutth</u>		ications and CD does not at to groundy responsibility Title: Date:	perform c relieve th vater, surfa for comp <u>EHS S</u> 04/03,	orrective actions for rele e operator of liability sh ace water, human health liance with any other fe pecialist	eases which may endanger rould their operations have or the environment. In ederal, state, or local laws		
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State of New Mexico

Page 6

Form C-141

Oil Conservation Division

Incident ID	nAPP2302639601
District RP	
Facility ID	
Application ID	

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

Description of remediation activities

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

Printed Name: <u>Heather Woods</u>	Title:EHS Specialist
Signature: Alath M. Wood	Date:04/03/2023
email: <u>Heather.Woods@whiptialmidstream.com</u>	Telephone: (505) 512-9797

OCD Only

Received by: Jocelyn Harimon

Date: 04/04/2023

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

Closure Approved by:	Nelson Velez	Date:	04/11/2023
Printed Name:	Nelson Velez	Title:	Environmental Specialist – Adv



March 30, 2023

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

Re: Remediation Report and Closure Request Gathering Pipeline Release - Chaco 147H San Juan County, New Mexico Whiptail Midstream, LLC NMOCD Incident No: nAPP2302639601

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Whiptail Midstream, LLC (Whiptail), presents this *Remediation Report and Closure Request* for a release from a gathering pipeline at the Chaco 147H production well (Site), which is operated by Enduring Resources, LLC. The Site is located on federal land managed by the Bureau of Land Management (BLM) in Unit I, Section 16, Township 23 North, Range 8 West, in San Juan County, New Mexico (Figure 1). The work described in this report was performed to address petroleum hydrocarbon impacted soil originating from a release of crude oil from a valve body on the gathering pipeline. Based on the remediation activities performed and laboratory analytical results from soil confirmation samples, Whiptail is requesting closure and no further action for Incident Number nAPP2302639601.

SITE BACKGROUND

On January 25, 2023, Whiptail personnel discovered crude oil originating from a failed O-ring on a valve body on a crude oil gathering pipeline. The pipeline was immediately shut in. Whiptail estimated that approximately 10 barrels (bbls) of crude oil sprayed, then pooled on the nearby ground surface. The crude oil mixed with melting snow, resulting in oily water flowing off pad and ultimately into an unnamed dry wash southwest of the well pad for approximately 350 feet. Berms were constructed to limit downstream migration of the pooled liquid and a vacuum truck was dispatched to recover fluids. In total, approximately 60 bbls of oily water mixture was recovered from the release path, of which 10 bbls are estimated to be oil originating from the release with the reminder melted snow water. As part of emergency response actions to prevent further downstream migration of the oily water, Whiptail excavated the top 1 to 2 feet of saturated soil along the release footprint. Whiptail reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on January 26, 2023 (Appendix A). The release was assigned Incident Number nAPP2302639601. Additionally, Ensolum submitted a Report of Undesirable Event to the BLM on January 26, 2023.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As part of the site investigation, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 29, Sections 11 and 12 (19.15.29.11 and 12) of the New Mexico Administrative Code (NMAC). Geology at the Site is the Paleocene

Whiptail Midstream, LLC Remediation Report and Closure Request Chaco 147H

Nacimiento Formation. In the report titled "Hydrogeology and Water Resources of San Juan Basin, New Mexico" (Stone, et. al., 1983), the Nacimiento Formation is characterized by various lithologies including interbedded black, carbonaceous mudstones and white, coarse-grained sandstones in the lower Formation, and mudstone and sandstone in the upper Formation. This Formation ranges in thickness from 418 feet to 2,232 feet. Stone and others state that though no aquifer tests are available for the Nacimiento Formation, but transmissivities of up to 100 square feet per day may be expected in some of the coarser, more continuous sandstone bodies. Where sufficient yield is present, the primary use of water from this Formation is for domestic and/or livestock supply. The Nacimiento Formation is underlain by the Ojo Alamo Formation.

The release affected a portion of a significant watercourse. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake (Figure 1). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs), based on a New Mexico Office of the State Engineer (NMOSE) water well SJ-03978 POD1, located approximately ½-mile southeast of the Site and 50 feet lower in elevation. The recorded depth to water on the NMOSE database permit is 260 feet bgs (Appendix B). No wellhead protection areas, springs, or domestic/stock wells are located within a ½-mile of the Site. There are no wetlands within 300 feet of the Site. The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

Based on the information presented above and in accordance with the *Table I, Closure Criteria for Soils Impacted by a Release* (19.15.29.12 of the NMAC), the following NMOCD Table I Closure Criteria are applied to the Site based on the proximity to a significant watercourse:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 100 mg/kg
- Chloride: 600 mg/kg

EXCAVATION AND SOIL SAMPLING ACTIVITIES

On January 28, 2023, Ensolum personnel mapped the emergency response excavation extent utilizing a handheld Global Positioning System (GPS) and conducted a preliminary assessment of the release footprint. Additional soil removal was recommended and Ensolum and Whiptail requested a variance from the NMOCD to collect confirmation soil samples at a frequency of one 5-point composite sample per 1,000 square feet. In any instance where those soil samples exceed the NMOCD Table I Closure Criteria, the subsequent samples would be collected at a frequency of one sample per 500 square feet. The variance was approved by the NMOCD via email on February 8, 2023. Sampling notifications and variance requests submitted to the NMOCD are attached as Appendix A.

Additional excavation, field screening, and soil sampling were performed between February 2 and February 10, 2023. To direct excavation activities, Ensolum personnel field screened soil for volatile organic compounds (VOCs) using a calibrated photoionization detector (PID). The release extent was divided into individual sampling areas representing no more than 1,000-square feet from which five-point composite soil samples were collected. Due to the shallow nature of the excavation in several areas (less than 2 feet in depth), shallow sidewall areas were incorporated into the composite floor samples. Where sidewalls exceeded 2 feet in depth, separate composite sidewall samples were collected representing no more than one sample per 1,000 square feet. If



laboratory analytical results from sidewall and/or floor samples exceeded the NMOCD Table I Closure Criteria, additional soil was removed from that area and a subsequent sample representing the newly exposed area was collected at a frequency of one sample per no more than 500 square feet. All excavation confirmation samples submitted for laboratory analysis are depicted on Figure 2.

The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 6 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All samples were submitted for analyses of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH following EPA Method 8015M/D; and chloride following EPA Method 300.0.

The excavation was completed to depths ranging between 1 and 5 feet bgs to the lateral extent depicted in Figure 2. In total, approximately 3,254 cubic yards of soil were removed from the Site and transported for disposal at the Envirotech Landfarm in San Juan County, New Mexico. Following the remediation activities, Whiptail backfilled where appropriate and recontoured the affected areas.

RESULTS

Laboratory analytical results indicate all final confirmation samples were in compliance with the NMOCD Table I Closure Criteria. Analytical results are summarized in Table 1, with complete laboratory reports attached as Appendix C. Photographs taken by Ensolum during the excavation and by Whiptail after backfilling are included in Appendix D.

CLOSURE REQUEST

Excavation of impacted soil was conducted to address the release of crude oil that occurred on January 25, 2023. Laboratory analytical results for soil samples collected from the final excavation extent indicated that all concentrations of BTEX, TPH, and chloride were compliant with the NMOCD Table I Closure Criteria and the reclamation requirement for the top four feet of soil off-pad, and no further remediation is required. Whiptail has backfilled the excavation on the well pad and adjacent slope with clean material and recontoured the Site and wash to match pre-existing conditions. Excavation of impacted soil has mitigated impacts at this Site and these remedial actions are protective of human health, the environment, and groundwater. As such, Whiptail respectfully requests closure for Incident Number nAPP2302639601.

Sincerely,

ENSOLUM, LLC

Reece Hanson Staff Geologist (970) 210-9803 rhanson@ensolum.com

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



Whiptail Midstream, LLC Remediation Report and Closure Request Chaco 147H

Attachments:

Figure 1:	Site Location Map
Figure 2:	Excavation Soil Sample Locations
Table 1:	Soil Sample Analytical Results
Appendix A:	NMOCD Correspondence
Appendix B:	NMOSE Well Summary
Appendix C:	Laboratory Analytical Reports
Appendix D:	Photographic Log

REFERENCES

Stone, W., Lyford, F., Frenzel, P., Mizell, N., & Padgett, E. (1983). Hydrogeology and Water Resources of San Juan Basin, New Mexico. New Mexico Bureau of Mines & Mineral Resources.

Page 7 of 118

Page 4



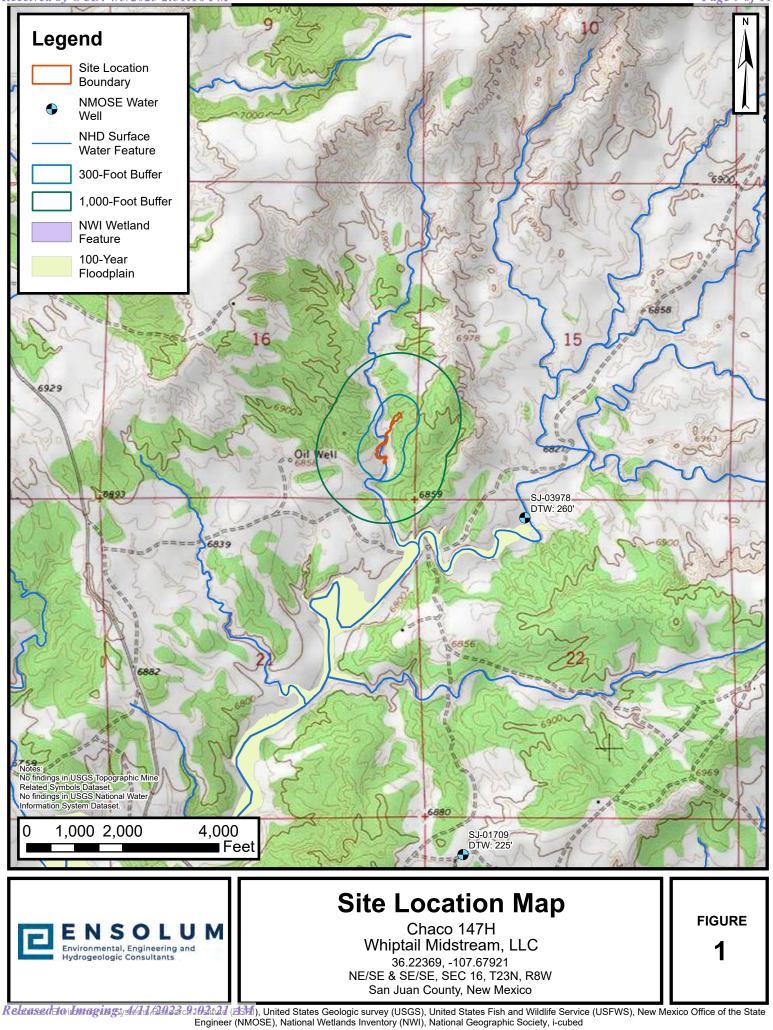


FIGURES

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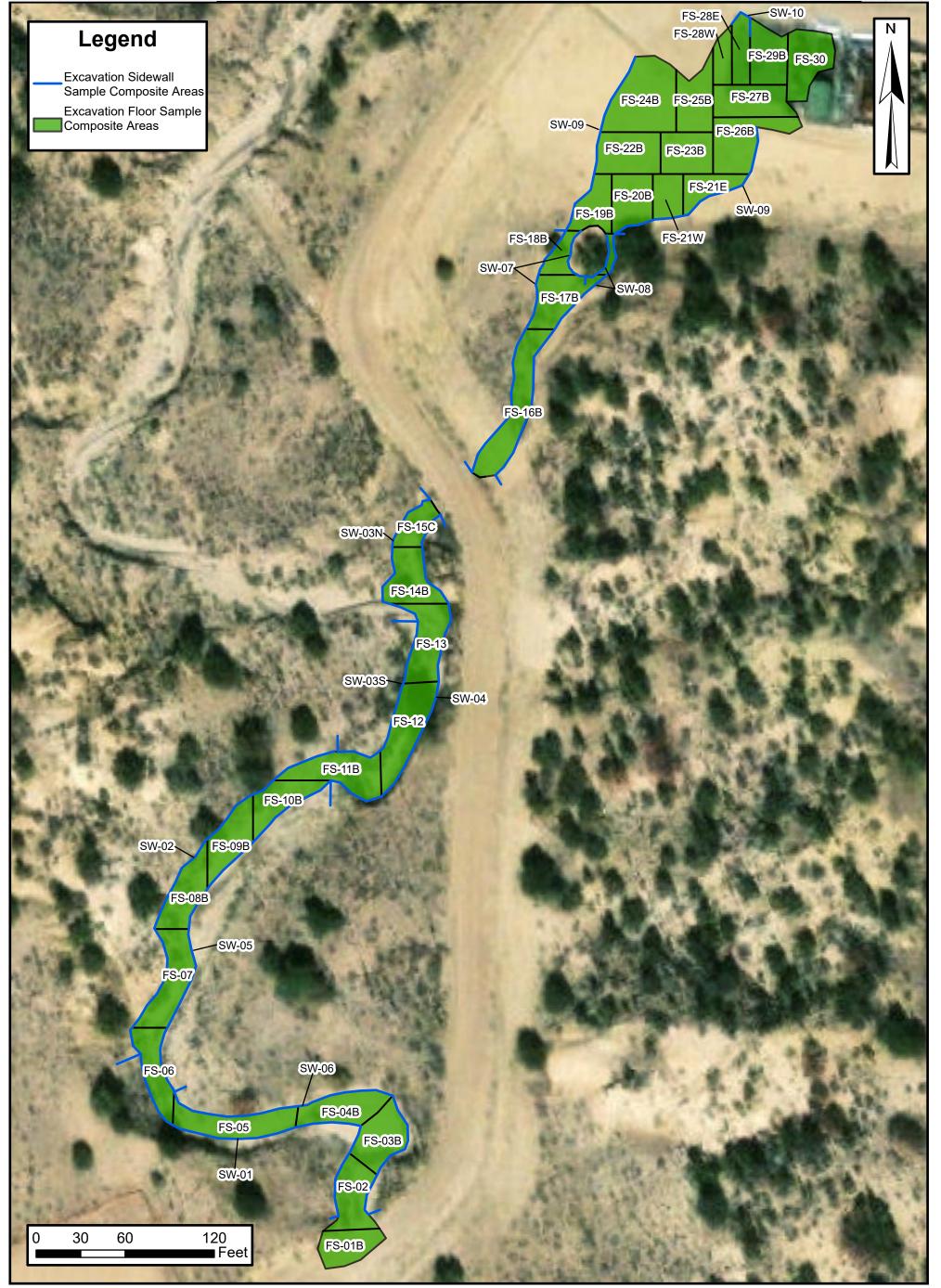
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Page 9 of 118



Received by OCD: 4/3/2023 2:31:16 PM

Page 10 of 118



Excavation Soil Sample Locations

Chaco 147H Whiptail Midstream, LLC

36.22369, -107.67921 NE/SE & SE/SE, SEC 16, T23N, R8W San Juan County, New Mexico FIGURE

2

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ENSOLUM

Environmental, Engineering and Hydrogeologic Consultants

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



TABLE



						TABLE							
						TABLE							
					SOIL	SAMPLE ANALY		5					
						Whiptail Midstre							
						San Juan County,	New Mexico	-		1		-	
Sample Identification	Date	Depth (feet)	PID Measurement (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD 1	Table I Closure Cr	riteria	NE	10	NE	NE	NE	50	NE	NE	NE	100	600
FS-01B	2/3/2023	2-3	58.2	<0.022	<0.044	<0.044	<0.087	<0.087	<4.4	<9.9	<49	<49	<60
FS-02	2/2/2023	2-3.5	116	<0.020	<0.040	<0.040	<0.080	<0.080	<4.0	15	<48	15	<60
FS-03B	2/2/2023	2-3	14	<0.019	<0.038	<0.038	<0.076	<0.076	<3.8	<9.6	<48	<48	<60
FS-04B	2/2/2023	2-3	24.7	<0.018	<0.037	<0.037	<0.073	<0.073	<3.7	<9.5	<47	<47	<60
FS-05	2/2/2023	2-3.5	85	<0.0078	<0.016	<0.016	<0.031	<0.031	<1.6	15	<49	15	<60
FS-06	2/2/2023	2-3	82.5	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	30	<48	30	<60
FS-07	2/2/2023	2-3	28.8	<0.021	<0.042	<0.042	<0.083	<0.083	<4.2	13	<50	13	<60
FS-08B	2/3/2023	2-3.5	0.1	<0.020	<0.039	<0.039	<0.079	<0.079	<3.9	<9.9	<49	<49	<60
FS-09B	2/3/2023	2-3	4.2	<0.020	<0.039	<0.039	<0.079	<0.079	<3.9	12	<48	12	<60
FS-10B	2/3/2023	2-3	18.5	<0.018	<0.037	<0.037	<0.074	<0.074	<3.7	11	<47	11	<60
FS-11B	2/3/2023	2-4	0.6	<0.023	<0.045	<0.045	<0.090	<0.090	<4.5	11	<47	11	<60
FS-12	2/2/2023	2-3.5	132	<0.021	<0.042	<0.042	<0.084	<0.084	<4.2	11	<49	11	<60
FS-13	2/2/2023	2-3.5	110	<0.023	<0.045	<0.045	<0.090	<0.090	<4.5	22	<50	22	<60
FS-14B	2/3/2023	2-4	1.5	<0.017	<0.034	<0.034	<0.068	<0.068	<3.4	12	<47	12	<60
FS-15B	2/3/2023	3-4.5	4.2	< 0.020	<0.039	< 0.039	<0.078	<0.078	<3.9	120	56	176	<60
FS-15C*	2/7/2023	3.5-5	3.3	<0.017	<0.035	<0.035	<0.070	<0.070	<3.5	<15	<49	<49	<60
FS-16B	2/8/2023	2-4	72.6	<0.040	<0.081	<0.081	<0.16	<0.16	<8.1	40	<50	40	<60
FS-17B	2/8/2023	3-4	16.6	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	14	<46	14	<60
FS-18B	2/8/2023	3-4	4.4	<0.019	<0.038	<0.038	<0.075	<0.075	<3.8	<14	<48	<48	<60
FS-19B	2/7/2023	2-4	2	<0.017	<0.035	<0.035	<0.070	<0.070	<3.5	<14	<45	<45	<60
FS-20B	2/7/2023	1-3.5	2	<0.024	<0.048	<0.048	<0.095	<0.095	<4.8	<13	<44	<44	<60
FS-21B	2/7/2023	1-2	82	<0.023	<0.045	<0.045	<0.091	<0.091	<4.5	120	60	180	<60
FS-21E*	2/10/2023	2.5-3.5	45	<0.017	< 0.035	<0.035	<0.069	<0.069	<3.5	<10	<50	<50	<60
FS-21W*	2/10/2023	2.5-3.5	23	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.7	<49	<49	<60
FS-22B	2/7/2023	1-2	14.9	<0.018	<0.036	< 0.036	<0.072	<0.072	<3.6	<15	<49	<49	<60
FS-23B	2/7/2023	2-4	7	<0.022	<0.044	<0.044	<0.089	<0.089	<4.4	17	<45	17	<59
FS-24B	2/8/2023	1-2	0.6	<0.020	< 0.039	< 0.039	<0.078	<0.078	<3.9	<14	<48	<48	<60
FS-25B	2/8/2023	2-4	1.8	<0.022	<0.045	<0.045	<0.090	<0.090	<4.5	<14	<46	<46	<60
FS-26B	2/7/2023	2	22	<0.020	<0.040	<0.040	<0.080	<0.080	<4.0	82	<48	82	<60
FS-27B	2/8/2023	1.5-2	7.7	<0.020	<0.041	<0.041	<0.081	<0.081	<4.1	20	<49	20	<60
FS-28B	2/8/2023	2	85.4	<0.072	≪0.14	≪0.14	0.47	0.47	18	280	89	387	<60
FS-28E*	2/10/2023	3	42	<0.017	< 0.035	< 0.035	<0.070	<0.070	<3.5	<9.5	<47	<47	<60
FS-28W*	2/10/2023	3	15	<0.017	<0.034	<0.034	<0.069	<0.069	<3.4	<9.6	<48	<48	<60
FS-29B	2/8/2023	2	17.3	<0.016	<0.031	<0.031	<0.063	<0.063	<3.1	<14	<46	<46	<60
FS-30	2/8/2023	0-0.5	1.5	<0.028	<0.056	<0.056	<0.11	<0.11	<5.6	16	<48	16	<60

E N S O L U M

	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Chaco 147H Whiptail Midstream, LLC San Juan County, New Mexico												
Sample Identification	Date	Depth (feet)	PID Measurement (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD 1	Table I Closure Cr	riteria	NE	10	NE	NE	NE	50	NE	NE	NE	100	600
SW-01	2/3/2023	0-3.5	10.6	<0.023	<0.046	<0.046	<0.091	<0.091	<4.6	11	<46	11	<60
SW-02	2/3/2023	0-4	19.5	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	14	<49	14	<60
SW-03	2/3/2023	0-4	6.3	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	96	54	150	<61
SW-03S*	2/7/2023	0-3.5	0.8	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<14	<48	<48	<60
SW-03N*	2/7/2023	0-4	0.3	<0.021	<0.041	<0.041	<0.082	<0.082	<4.1	20	<49	20	<60
SW-04	2/3/2023	0-4	9.7	<0.020	<0.039	<0.039	<0.078	<0.078	<3.9	10	<47	10	<60
SW-05	2/3/2023	0-3.5	6.7	<0.022	<0.044	<0.044	<0.088	<0.088	<4.4	23	<49	23	<60
SW-06	2/3/2023	0-3.5	5	<0.019	<0.039	<0.039	<0.077	<0.077	<3.9	13	<49	13	<60
SW-07	2/8/2023	0-4	2.1	<0.020	<0.041	<0.041	<0.082	<0.082	<4.1	<13	<43	<43	<60
SW-08	2/8/2023	0-4	1	<0.021	<0.043	<0.043	<0.086	<0.086	<4.3	17	<49	17	<60
SW-09	2/8/2023	0-2	1.6	<0.019	<0.037	<0.037	<0.074	<0.074	<3.7	29	<47	29	<60
SW-10	2/10/2023	0-3	57	<0.017	<0.034	<0.034	<0.069	<0.069	<3.4	<9.9	<49	<49	<60

Notes:

bgs: below ground surface BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes mg/kg: milligrams per kilogram NA: Not Analyzed NE: Not Established NMOCD: New Mexico Oil Conservation Division PID: Photoionization Detector PPM: Parts Per Millon * denotes re-sampling area representing no more than 500 square feet GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

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

Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table 1 Closure Criteria for Soils Impacted by a Release

Samples in Gray and strikethrough text indicate samples have been excavated and re-sampled



APPENDIX A

NMOCD Correspondance

From:	Brooke Herb
To:	Landon, Sherrie C; Velez, Nelson, EMNRD
Cc:	Don Wicburg
Subject:	Release Notification
Date:	Thursday, January 26, 2023 12:35:00 PM
Attachments:	Signed Initial C-141 Chaco 147H Release.pdf image001.png image002.png image003.png image004.png

Whiptail Midstream discovered a crude oil pipeline release yesterday January 25, 2023, at 14:00 near the Chaco 147H (36.223692°, -107.679210°). The release was estimated to be 10 bbls of crude oil and approximately 8 bbls were recovered via vac truck. The release went off pad and reached a small wash to the southwest of the facility. The wash was bermed to prevent further migration. The ROW states that cultural resources are not present within the immediate project area. Sherrie, I will follow up this email with a phone call to further discuss remediation of the undisturbed area.

A NOR and initial C-141 have been submitted to the NMOCD portal. The release was assigned incident number nAPP2302639601. The initial C-141 is attached to this email.

Thank you, Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From:	Brooke Herb
То:	Velez, Nelson, EMNRD; Landon, Sherrie C; Adeloye, Abiodun A; Enviro, OCD, EMNRD
Cc:	Don Wicburg; Cody Boyd; Buck Allison
Subject:	RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request
Date:	Friday, February 10, 2023 1:04:00 PM
Attachments:	image001.png image002.png image003.png image004.png

Nelson,

Based on additional field screening results collected today, Ensolum requests a variance to 19.15.29.12D (1a) NMAC in order to collect additional confirmation soil samples today, February 10, 2023.

Please let me know if you have any questions or concerns. Thank you,

Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Sent: Wednesday, February 8, 2023 9:58 AM

To: Brooke Herb <bherb@ensolum.com>; Landon, Sherrie C <slandon@blm.gov>; Adeloye, Abiodun

A <aadeloye@blm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Cc: Don Wicburg <don.wicburg@whiptailmidstream.com>; Cody Boyd

<cody.boyd@whiptailmidstream.com>; Buck Allison <buck.allison@whiptailmidstream.com>

Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Brooke,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards,

Nelson Velez • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87410 (505) 469-6146 | <u>nelson.velez@emnrd.nm.gov</u> <u>http://www.emnrd.state.nm.us/OCD/</u>



From: Brooke Herb <<u>bherb@ensolum.com</u>>

Sent: Wednesday, February 8, 2023 9:47 AM

To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>;
 Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
 Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
 <<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
 Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Ensolum on behalf of Whiptail would like to again request a variance to the 48-hour notification period required per 19.15.29.12D (1A). We are requesting a variance in order to conduct additional confirmation soil sampling today starting at noon.

Based on field screening and site conditions, sampling may progress daily for the next couple of days. I will keep you informed as it does.

Please let me know if you have questions or concerns.

Thank you,

Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC in f

From: Brooke Herb

Sent: Monday, February 6, 2023 2:13 PM

To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>; Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Ensolum on behalf of Whiptail would like to request a variance to the 48-hour notification period required per 19.15.29.12D paragraph 1A. We are requesting a variance in order to conduct additional confirmation soil sampling tomorrow at 10 AM.

Please let me know if you have questions or concerns. Thank you, Brooke



From: Brooke Herb

Sent: Thursday, February 2, 2023 2:07 PM
To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>; Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Ensolum on behalf of Whiptail requests a variance to the 48-hour notification period required per 19.15.29.12D paragraph 1A. Based on the site conditions today additional sampling is required. We are requesting a variance in order to conduct confirmation soil sampling tomorrow at 10 AM. Please let me know if you have questions or concerns.

Thank you, Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>

Sent: Tuesday, January 31, 2023 1:41 PM

To: Brooke Herb <<u>bherb@ensolum.com</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>; Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
 Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd <<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
 Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Brooke,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling according to the next paragraph. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Based on the surface conditions which the release flow traveled and the action taken by Whiptail's in terminating further down gradient movement, your variance request specifically addressing 19.15.29.12D (1c) NMAC is approved under the conditions mentioned within your email below.

Please re-evaluate the quantity loss of the release provided to OCD thus far. In addition, please submit the sampling area map/diagram/schematic to OCD prior to Thursday's sampling event.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards

Nelson Velez • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87410 (505) 469-6146 | <u>nelson.velez@emnrd.nm.gov</u> <u>http://www.emnrd.state.nm.us/OCD/</u>



From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Tuesday, January 31, 2023 10:45 AM
To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>;
Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

On behalf of Whiptail Midstream, Ensolum is submitting this notification to perform closure soil sampling at the Chaco 147H Release (nAPP2302639601, 36.223692°, -107.679210°) on Thursday February 2, 2023, at 10:45 AM. We would like to request a sampling variance to collect 5-point composite samples every 1,000 square feet. If analytical results exceed the closure criteria in any of the 1,000-square foot areas, after additional remediation, additional samples will be collected at a

500 square foot interval. I will follow up with an attachment of the proposed 1,000 square foot sampling areas shortly.

Please let me know if you have any questions.

Thank you,

Brooke Herb



From:	Brooke Herb
То:	<u>Adeloye, Abiodun A; Culp, Robert L</u>
Cc:	Buck Allison; Landon, Sherrie C
Subject:	RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request
Date:	Thursday, February 9, 2023 2:48:00 PM
Attachments:	image004.png
	image005.png
	image006.png
	image007.png

Thank you for the quick response. Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC in f

From: Adeloye, Abiodun A <aadeloye@blm.gov>
Sent: Thursday, February 9, 2023 2:45 PM
To: Brooke Herb <bherb@ensolum.com>; Culp, Robert L <rculp@blm.gov>
Cc: Buck Allison <buck.allison@whiptailmidstream.com>; Landon, Sherrie C <slandon@blm.gov>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Hi, Brooke, Bob is okay with the Whiptail using the dirt as shown in the pictures. Please know that Whiptail would be responsible for any noxious weeds treatments in the future as a result of the new disturbance associated with this remediation. Please let me know if have any questions.

Thank you.

Abiodun Adeloye (Emmanuel), NRS

Bureau of Land Management Farmington Field Office 6251 College Blvd., Suite A Farmington, NM 87402 Office Phone: 505-564-7665 Cell Phone: 505-635-0984

From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Thursday, February 9, 2023 2:28 PM
To: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Cc: Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Please see the photos below and let me know if you have any questions or concerns with Whiptail using

this material for backfill. Thanks, Brooke









Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>
Sent: Thursday, February 9, 2023 8:51 AM
To: Brooke Herb <<u>bherb@ensolum.com</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Hi, Brooke, can you please send the picture of the area where the dirt would be pulled from to Bob. Maybe the township, range, section, and quart/quart/ Long/Lat any information that might make it easier to help you out. Thank you.

Abiodun Adeloye (Emmanuel), NRS

Bureau of Land Management Farmington Field Office 6251 College Blvd., Suite A *Farmington, NM 87402* Office Phone: 505-564-7665 Cell Phone: 505-635-0984

From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Wednesday, February 8, 2023 1:25 PM
To: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Bob,

Do you have any additional questions or concerns about the backfill. I believe they will be ready to start backfilling in the next day or so.

Thank you, Brooke



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>
Sent: Monday, February 6, 2023 2:31 PM
To: Brooke Herb <<u>bherb@ensolum.com</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Thanks Brooke, Hopefully, the information is enough for Bob to help with the work.

Abiodun Adeloye (Emmanuel), NRS

Bureau of Land Management Farmington Field Office 6251 College Blvd., Suite A Farmington, NM 87402 Office Phone: 505-564-7665 Cell Phone: 505-635-0984

From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Monday, February 6, 2023 2:05 PM
To: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Sorry I missed your call earlier. The backfill is being sourced from excess native soil from pad development in the northwest quarter of the northwest quarter of Section 34, T24N, R9W. Please feel free to call with any questions.

Thanks, Brooke



From: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>
Sent: Monday, February 6, 2023 11:27 AM
To: Brooke Herb <<u>bherb@ensolum.com</u>>; Culp, Robert L <<u>rculp@blm.gov</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Hi, Brooke, thanks for the information. I would like to know exactly where the material would be taken from for the backfilling. The Township, Range, Section, quart/quart, and name if possible. BLM would like to know if the location is free of noxious weeds. I have included Bob Culp the Range Specialist for the area with this reply.

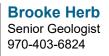
Please let me know if you have any questions. Thank you.

Abiodun Adeloye (Emmanuel), NRS

Bureau of Land Management Farmington Field Office 6251 College Blvd., Suite A Farmington, NM 87402 Office Phone: 505-564-7665 Cell Phone: 505-635-0984

From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Friday, February 3, 2023 3:38 PM
To: Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>
Cc: Landon, Sherrie C <<u>slandon@blm.gov</u>>; Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>
Subject: FW: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Emmanuel, Attached is a remediation work plan for the Chaco 147H. Please let me know if you have any questions. Thanks, Brooke





From: Brooke Herb

Sent: Thursday, February 2, 2023 2:07 PM
To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>;
Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

Ensolum on behalf of Whiptail requests a variance to the 48-hour notification period required per 19.15.29.12D paragraph 1A. Based on the site conditions today additional sampling is required. We are requesting a variance in order to conduct confirmation soil sampling tomorrow at 10 AM. Please let me know if you have questions or concerns. Thank you,

Brooke

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in

Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC

From: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>
Sent: Tuesday, January 31, 2023 1:41 PM
To: Brooke Herb <<u>bherb@ensolum.com</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>; Adeloye, Abiodun A
<<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: RE: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

[**EXTERNAL EMAIL**]

Brooke,

Thank you for the notice. If an OCD representative is not on-site on the date &/or time given, please proceed with your sampling according to the next paragraph. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Based on the surface conditions which the release flow traveled and the action taken by Whiptail's in terminating further down gradient movement, your variance request specifically addressing 19.15.29.12D (1c) NMAC is approved under the conditions mentioned within your email below.

Please re-evaluate the quantity loss of the release provided to OCD thus far. In addition, please submit the sampling area map/diagram/schematic to OCD prior to Thursday's sampling event.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards

Nelson Velez • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division 1000 Rio Brazos Road | Aztec, NM 87410 (505) 469-6146 | <u>nelson.velez@emnrd.nm.gov</u> <u>http://www.emnrd.state.nm.us/OCD/</u>



From: Brooke Herb <<u>bherb@ensolum.com</u>>
Sent: Tuesday, January 31, 2023 10:45 AM
To: Velez, Nelson, EMNRD <<u>Nelson.Velez@emnrd.nm.gov</u>>; Landon, Sherrie C <<u>slandon@blm.gov</u>>;
Adeloye, Abiodun A <<u>aadeloye@blm.gov</u>>; Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>
Cc: Don Wicburg <<u>don.wicburg@whiptailmidstream.com</u>>; Cody Boyd
<<u>cody.boyd@whiptailmidstream.com</u>>; Buck Allison <<u>buck.allison@whiptailmidstream.com</u>>
Subject: [EXTERNAL] Chaco 147H Sampling Notification and Variance Request

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

On behalf of Whiptail Midstream, Ensolum is submitting this notification to perform closure soil sampling at the Chaco 147H Release (nAPP2302639601, 36.223692°, -107.679210°) on Thursday February 2, 2023, at 10:45 AM. We would like to request a sampling variance to collect 5-point composite samples every 1,000 square feet. If analytical results exceed the closure criteria in any of the 1,000-square foot areas, after additional remediation, additional samples will be collected at a 500 square foot interval. I will follow up with an attachment of the proposed 1,000 square foot sampling areas shortly. Please let me know if you have any questions.

Thank you,

Brooke Herb



Brooke Herb Senior Geologist 970-403-6824 Ensolum, LLC *Received by OCD: 4/3/2023 2:31:16 PM*



APPENDIX B

NMOSE Well Summary



New Mexico Office of the State Engineer Point of Diversion Summary

			` 1	ers are 1=									
			(qua	ters are	smalle	est to	largest)		(NAD83 U	TM in meters)			
Well Tag	POL) Number	Q64	Q16 Q) 4 S	Sec	Tws	Rng	Χ	Y			
	SJ 0	3978 POD1	1	2	1	22	23N	08W	259816	4011541 🌍			
^x Driller Lic	ense:	1357	Driller	[.] Comp	oany	:	BA	ILEY D	RILLING C	COMPANY			
Driller Na	me:	MARK BAILEY											
Drill Start	Date:	08/01/2011	Drill F	'inish I	Date	:	0	8/12/201	1 Pl	ug Date:			
Log File D	ate:	08/31/2011	PCW	Rcv Da	ite:				So	urce:	Shallow		
Pump Type:		Pipe Discharge Size:					Es	Estimated Yield:					
Casing Siz	æ:	7.88	Depth	Well:			5	00 feet	De	Estimated Yield:4 GPMDepth Water:260 fee			
X	Wate	er Bearing Stratific:	ations:		Тор	B	ottom	Desci	ription				
					240)	260) Sands	stone/Grave	l/Conglomerate			
					400)	440) Sands	stone/Grave	l/Conglomerate			
X		Casing Perfor	rations:		Тор	B	ottom	l					
					0)	500)					

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

3/30/23 1:57 PM

POINT OF DIVERSION SUMMARY



APPENDIX C

Laboratory Analytical Reports



February 10, 2023

Brooke Herb ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Chaco 147H

OrderNo.: 2302205

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 21 sample(s) on 2/4/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT	ENSOLUM	Client Sample ID: FS-02
Project:	Chaco 147H	Collection Date: 2/2/2023 11:18:00 AM
Lab ID:	2302205-001	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 12:10:52 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	15	9.7	mg/Kg	1	2/6/2023 9:41:56 AM	73006
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/6/2023 9:41:56 AM	73006
Surr: DNOP	96.8	69-147	%Rec	1	2/6/2023 9:41:56 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	2/4/2023 11:22:00 AM	GS9442′
Surr: BFB	104	37.7-212	%Rec	1	2/4/2023 11:22:00 AM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.020	mg/Kg	1	2/4/2023 11:22:00 AM	BS94421
Toluene	ND	0.040	mg/Kg	1	2/4/2023 11:22:00 AM	BS94421
Ethylbenzene	ND	0.040	mg/Kg	1	2/4/2023 11:22:00 AM	BS94421
Xylenes, Total	ND	0.080	mg/Kg	1	2/4/2023 11:22:00 AM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 11:22:00 AM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 1 of 28

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-05
Project:	Chaco 147H	Collection Date: 2/2/2023 11:28:00 AM
Lab ID:	2302205-002	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 12:48:07 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst:	DGH
Diesel Range Organics (DRO)	15	9.7	mg/Kg	1	2/6/2023 9:52:33 AM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 9:52:33 AM	73006
Surr: DNOP	86.2	69-147	%Rec	1	2/6/2023 9:52:33 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	1.6	mg/Kg	1	2/4/2023 11:42:00 AM	GS9442′
Surr: BFB	105	37.7-212	%Rec	1	2/4/2023 11:42:00 AM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.0078	mg/Kg	1	2/4/2023 11:42:00 AM	BS94421
Toluene	ND	0.016	mg/Kg	1	2/4/2023 11:42:00 AM	BS94421
Ethylbenzene	ND	0.016	mg/Kg	1	2/4/2023 11:42:00 AM	BS94421
Xylenes, Total	ND	0.031	mg/Kg	1	2/4/2023 11:42:00 AM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 11:42:00 AM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL

Reporting Limit

Page 2 of 28

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-06
Project:	Chaco 147H	Collection Date: 2/2/2023 11:48:00 AM
Lab ID:	2302205-003	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 1:25:21 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst:	DGH
Diesel Range Organics (DRO)	30	9.7	mg/Kg	1	2/6/2023 10:06:10 AM	73006
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/6/2023 10:06:10 AM	73006
Surr: DNOP	91.5	69-147	%Rec	1	2/6/2023 10:06:10 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/4/2023 12:02:00 PM	GS9442′
Surr: BFB	106	37.7-212	%Rec	1	2/4/2023 12:02:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst:	ССМ
Benzene	ND	0.024	mg/Kg	1	2/4/2023 12:02:00 PM	BS94421
Toluene	ND	0.048	mg/Kg	1	2/4/2023 12:02:00 PM	BS94421
Ethylbenzene	ND	0.048	mg/Kg	1	2/4/2023 12:02:00 PM	BS94421
Xylenes, Total	ND	0.097	mg/Kg	1	2/4/2023 12:02:00 PM	BS94421
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	2/4/2023 12:02:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 3 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-07
Project: Chaco 147H	Collection Date: 2/2/2023 11:53:00 AM
Lab ID: 2302205-004	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 1:37:45 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	13	9.9	mg/Kg	1	2/6/2023 10:16:48 AM	73006
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/6/2023 10:16:48 AM	73006
Surr: DNOP	95.0	69-147	%Rec	1	2/6/2023 10:16:48 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	2/4/2023 12:22:00 PM	GS9442 [,]
Surr: BFB	110	37.7-212	%Rec	1	2/4/2023 12:22:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.021	mg/Kg	1	2/4/2023 12:22:00 PM	BS94421
Toluene	ND	0.042	mg/Kg	1	2/4/2023 12:22:00 PM	BS94421
Ethylbenzene	ND	0.042	mg/Kg	1	2/4/2023 12:22:00 PM	BS94421
Xylenes, Total	ND	0.083	mg/Kg	1	2/4/2023 12:22:00 PM	BS94421
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	2/4/2023 12:22:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 4 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT	ENSOLUM	Client Sample ID: FS-12
Project:	Chaco 147H	Collection Date: 2/2/2023 12:03:00 PM
Lab ID:	2302205-005	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 2:14:58 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	GANICS				Analyst:	DGH
Diesel Range Organics (DRO)	11	9.9	mg/Kg	1	2/6/2023 10:27:24 AM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 10:27:24 AM	73006
Surr: DNOP	93.6	69-147	%Rec	1	2/6/2023 10:27:24 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	2/4/2023 12:41:00 PM	GS9442′
Surr: BFB	103	37.7-212	%Rec	1	2/4/2023 12:41:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst:	ССМ
Benzene	ND	0.021	mg/Kg	1	2/4/2023 12:41:00 PM	BS94421
Toluene	ND	0.042	mg/Kg	1	2/4/2023 12:41:00 PM	BS94421
Ethylbenzene	ND	0.042	mg/Kg	1	2/4/2023 12:41:00 PM	BS94421
Xylenes, Total	ND	0.084	mg/Kg	1	2/4/2023 12:41:00 PM	BS94421
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	2/4/2023 12:41:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 5 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLU	M Client Sample ID: FS-13
Project: Chaco 14	Collection Date: 2/2/2023 12:06:00 PM
Lab ID: 2302205-	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 2:27:22 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	GANICS				Analyst:	DGH
Diesel Range Organics (DRO)	22	9.9	mg/Kg	1	2/6/2023 10:38:02 AM	73006
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/6/2023 10:38:02 AM	73006
Surr: DNOP	92.6	69-147	%Rec	1	2/6/2023 10:38:02 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	2/4/2023 1:01:00 PM	GS9442′
Surr: BFB	101	37.7-212	%Rec	1	2/4/2023 1:01:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst:	ССМ
Benzene	ND	0.023	mg/Kg	1	2/4/2023 1:01:00 PM	BS94421
Toluene	ND	0.045	mg/Kg	1	2/4/2023 1:01:00 PM	BS94421
Ethylbenzene	ND	0.045	mg/Kg	1	2/4/2023 1:01:00 PM	BS94421
Xylenes, Total	ND	0.090	mg/Kg	1	2/4/2023 1:01:00 PM	BS94421
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	2/4/2023 1:01:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- P Sample pH Not In RL Reporting Limit

Page 6 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-03B
Project: Chaco 147H	Collection Date: 2/2/2023 2:36:00 PM
Lab ID: 2302205-007	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 2:39:46 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst:	DGH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/6/2023 10:48:41 AM	73006
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/6/2023 10:48:41 AM	73006
Surr: DNOP	93.3	69-147	%Rec	1	2/6/2023 10:48:41 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	2/4/2023 1:21:00 PM	GS9442′
Surr: BFB	104	37.7-212	%Rec	1	2/4/2023 1:21:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst:	ССМ
Benzene	ND	0.019	mg/Kg	1	2/4/2023 1:21:00 PM	BS94421
Toluene	ND	0.038	mg/Kg	1	2/4/2023 1:21:00 PM	BS94421
Ethylbenzene	ND	0.038	mg/Kg	1	2/4/2023 1:21:00 PM	BS94421
Xylenes, Total	ND	0.076	mg/Kg	1	2/4/2023 1:21:00 PM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 1:21:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- Reporting Limit

RL

Page 7 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT	ENSOLUM	Client Sample ID: FS-04B
Project:	Chaco 147H	Collection Date: 2/2/2023 2:40:00 PM
Lab ID:	2302205-008	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 2:52:11 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	2/6/2023 10:59:24 AM	73006
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2023 10:59:24 AM	73006
Surr: DNOP	89.2	69-147	%Rec	1	2/6/2023 10:59:24 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/4/2023 1:41:00 PM	GS9442′
Surr: BFB	102	37.7-212	%Rec	1	2/4/2023 1:41:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.018	mg/Kg	1	2/4/2023 1:41:00 PM	BS94421
Toluene	ND	0.037	mg/Kg	1	2/4/2023 1:41:00 PM	BS94421
Ethylbenzene	ND	0.037	mg/Kg	1	2/4/2023 1:41:00 PM	BS94421
Xylenes, Total	ND	0.073	mg/Kg	1	2/4/2023 1:41:00 PM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 1:41:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р Reporting Limit

RL

Page 8 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-08B
Project: Chaco 147H	Collection Date: 2/3/2023 10:07:00 AM
Lab ID: 2302205-009	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:04:36 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	2/6/2023 11:10:03 AM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 11:10:03 AM	73006
Surr: DNOP	91.7	69-147	%Rec	1	2/6/2023 11:10:03 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/4/2023 2:01:00 PM	GS9442′
Surr: BFB	104	37.7-212	%Rec	1	2/4/2023 2:01:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.020	mg/Kg	1	2/4/2023 2:01:00 PM	BS94421
Toluene	ND	0.039	mg/Kg	1	2/4/2023 2:01:00 PM	BS94421
Ethylbenzene	ND	0.039	mg/Kg	1	2/4/2023 2:01:00 PM	BS94421
Xylenes, Total	ND	0.079	mg/Kg	1	2/4/2023 2:01:00 PM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 2:01:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 9 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-09B
Project:	Chaco 147H	Collection Date: 2/3/2023 10:10:00 AM
Lab ID:	2302205-010	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:17:00 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	12	9.5	mg/Kg	1	2/6/2023 11:20:44 AM	73006
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/6/2023 11:20:44 AM	73006
Surr: DNOP	91.3	69-147	%Rec	1	2/6/2023 11:20:44 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/4/2023 2:21:00 PM	GS9442′
Surr: BFB	106	37.7-212	%Rec	1	2/4/2023 2:21:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.020	mg/Kg	1	2/4/2023 2:21:00 PM	BS94421
Toluene	ND	0.039	mg/Kg	1	2/4/2023 2:21:00 PM	BS94421
Ethylbenzene	ND	0.039	mg/Kg	1	2/4/2023 2:21:00 PM	BS94421
Xylenes, Total	ND	0.079	mg/Kg	1	2/4/2023 2:21:00 PM	BS94421
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	2/4/2023 2:21:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL
 - Reporting Limit

Page 10 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-10B
Project:	Chaco 147H	Collection Date: 2/3/2023 1:20:00 PM
Lab ID:	2302205-011	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:29:24 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	SB
Diesel Range Organics (DRO)	11	9.3	mg/Kg	1	2/6/2023 10:18:55 AM	73006
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2023 10:18:55 AM	73006
Surr: DNOP	110	69-147	%Rec	1	2/6/2023 10:18:55 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/4/2023 3:00:00 PM	GS9442′
Surr: BFB	98.9	37.7-212	%Rec	1	2/4/2023 3:00:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.018	mg/Kg	1	2/4/2023 3:00:00 PM	BS94421
Toluene	ND	0.037	mg/Kg	1	2/4/2023 3:00:00 PM	BS94421
Ethylbenzene	ND	0.037	mg/Kg	1	2/4/2023 3:00:00 PM	BS94421
Xylenes, Total	ND	0.074	mg/Kg	1	2/4/2023 3:00:00 PM	BS94421
Surr: 4-Bromofluorobenzene	95.8	70-130	%Rec	1	2/4/2023 3:00:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit

Page 11 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-11B
Project: Chaco 147H	Collection Date: 2/3/2023 10:13:00 AM
Lab ID: 2302205-012	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:41:48 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst	SB
Diesel Range Organics (DRO)	11	9.5	mg/Kg	1	2/6/2023 10:32:45 AM	73006
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2023 10:32:45 AM	73006
Surr: DNOP	112	69-147	%Rec	1	2/6/2023 10:32:45 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	2/4/2023 3:20:00 PM	GS9442 ⁷
Surr: BFB	101	37.7-212	%Rec	1	2/4/2023 3:20:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	2/4/2023 3:20:00 PM	BS94421
Toluene	ND	0.045	mg/Kg	1	2/4/2023 3:20:00 PM	BS94421
Ethylbenzene	ND	0.045	mg/Kg	1	2/4/2023 3:20:00 PM	BS94421
Xylenes, Total	ND	0.090	mg/Kg	1	2/4/2023 3:20:00 PM	BS94421
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	2/4/2023 3:20:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-14B
Project: Chaco 147H	Collection Date: 2/3/2023 10:15:00 AM
Lab ID: 2302205-013	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:54:12 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	SB
Diesel Range Organics (DRO)	12	9.5	mg/Kg	1	2/6/2023 10:46:34 AM	73006
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2023 10:46:34 AM	73006
Surr: DNOP	110	69-147	%Rec	1	2/6/2023 10:46:34 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	2/4/2023 3:40:00 PM	GS9442′
Surr: BFB	105	37.7-212	%Rec	1	2/4/2023 3:40:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.017	mg/Kg	1	2/4/2023 3:40:00 PM	BS94421
Toluene	ND	0.034	mg/Kg	1	2/4/2023 3:40:00 PM	BS94421
Ethylbenzene	ND	0.034	mg/Kg	1	2/4/2023 3:40:00 PM	BS94421
Xylenes, Total	ND	0.068	mg/Kg	1	2/4/2023 3:40:00 PM	BS94421
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	2/4/2023 3:40:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 13 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-15B
Project: Chaco 147H	Collection Date: 2/3/2023 10:18:00 AM
Lab ID: 2302205-014	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 4:06:37 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	GANICS				Analyst	SB
Diesel Range Organics (DRO)	120	9.8	mg/Kg	1	2/6/2023 10:59:56 AM	73006
Motor Oil Range Organics (MRO)	56	49	mg/Kg	1	2/6/2023 10:59:56 AM	73006
Surr: DNOP	108	69-147	%Rec	1	2/6/2023 10:59:56 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/4/2023 3:59:00 PM	GS9442′
Surr: BFB	105	37.7-212	%Rec	1	2/4/2023 3:59:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.020	mg/Kg	1	2/4/2023 3:59:00 PM	BS94421
Toluene	ND	0.039	mg/Kg	1	2/4/2023 3:59:00 PM	BS94421
Ethylbenzene	ND	0.039	mg/Kg	1	2/4/2023 3:59:00 PM	BS94421
Xylenes, Total	ND	0.078	mg/Kg	1	2/4/2023 3:59:00 PM	BS94421
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	2/4/2023 3:59:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р Reporting Limit

RL

Page 14 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT: ENSOLUM	Client Sample ID: FS-01B
Project: Chaco 147H	Collection Date: 2/3/2023 2:10:00 PM
Lab ID: 2302205-015	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 4:43:51 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	2/6/2023 11:13:22 AM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 11:13:22 AM	73006
Surr: DNOP	112	69-147	%Rec	1	2/6/2023 11:13:22 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	2/4/2023 4:19:00 PM	GS9442′
Surr: BFB	104	37.7-212	%Rec	1	2/4/2023 4:19:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	: CCM
Benzene	ND	0.022	mg/Kg	1	2/4/2023 4:19:00 PM	BS94421
Toluene	ND	0.044	mg/Kg	1	2/4/2023 4:19:00 PM	BS94421
Ethylbenzene	ND	0.044	mg/Kg	1	2/4/2023 4:19:00 PM	BS94421
Xylenes, Total	ND	0.087	mg/Kg	1	2/4/2023 4:19:00 PM	BS94421
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	2/4/2023 4:19:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- r Sample pH Not I RL Reporting Limit

Page 15 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: SW-01
Project:	Chaco 147H	Collection Date: 2/3/2023 10:52:00 AM
Lab ID:	2302205-016	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 4:56:16 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst	SB
Diesel Range Organics (DRO)	11	9.2	mg/Kg	1	2/6/2023 11:26:49 AM	73006
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/6/2023 11:26:49 AM	73006
Surr: DNOP	112	69-147	%Rec	1	2/6/2023 11:26:49 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	2/4/2023 4:39:00 PM	GS9442′
Surr: BFB	101	37.7-212	%Rec	1	2/4/2023 4:39:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	2/4/2023 4:39:00 PM	BS94421
Toluene	ND	0.046	mg/Kg	1	2/4/2023 4:39:00 PM	BS94421
Ethylbenzene	ND	0.046	mg/Kg	1	2/4/2023 4:39:00 PM	BS94421
Xylenes, Total	ND	0.091	mg/Kg	1	2/4/2023 4:39:00 PM	BS94421
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	2/4/2023 4:39:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 16 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: SW-02
Project:	Chaco 147H	Collection Date: 2/3/2023 1:25:00 PM
Lab ID:	2302205-017	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 5:08:40 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst	SB
Diesel Range Organics (DRO)	14	9.9	mg/Kg	1	2/6/2023 11:40:10 AM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 11:40:10 AM	73006
Surr: DNOP	113	69-147	%Rec	1	2/6/2023 11:40:10 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	2/4/2023 4:58:00 PM	GS9442′
Surr: BFB	105	37.7-212	%Rec	1	2/4/2023 4:58:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	2/4/2023 4:58:00 PM	BS94421
Toluene	ND	0.046	mg/Kg	1	2/4/2023 4:58:00 PM	BS94421
Ethylbenzene	ND	0.046	mg/Kg	1	2/4/2023 4:58:00 PM	BS94421
Xylenes, Total	ND	0.092	mg/Kg	1	2/4/2023 4:58:00 PM	BS94421
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	2/4/2023 4:58:00 PM	BS94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

Page 17 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT	ENSOLUM	Client Sample ID: SW-03
Project:	Chaco 147H	Collection Date: 2/3/2023 10:55:00 AM
Lab ID:	2302205-018	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	NAI
Chloride	ND	61	mg/Kg	20	2/4/2023 5:21:04 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst:	SB
Diesel Range Organics (DRO)	96	9.3	mg/Kg	1	2/6/2023 11:53:30 AM	73006
Motor Oil Range Organics (MRO)	54	46	mg/Kg	1	2/6/2023 11:53:30 AM	73006
Surr: DNOP	110	69-147	%Rec	1	2/6/2023 11:53:30 AM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	ССМ
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	2/4/2023 5:18:00 PM	GS9442′
Surr: BFB	110	37.7-212	%Rec	1	2/4/2023 5:18:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.024	mg/Kg	1	2/4/2023 5:18:00 PM	BS94421
Toluene	ND	0.047	mg/Kg	1	2/4/2023 5:18:00 PM	BS94421
Ethylbenzene	ND	0.047	mg/Kg	1	2/4/2023 5:18:00 PM	BS94421
Xylenes, Total	ND	0.095	mg/Kg	1	2/4/2023 5:18:00 PM	BS94421
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	2/4/2023 5:18:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 18 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: SW-04
Project:	Chaco 147H	Collection Date: 2/3/2023 11:00:00 AM
Lab ID:	2302205-019	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 5:33:28 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	SB
Diesel Range Organics (DRO)	10	9.5	mg/Kg	1	2/6/2023 12:06:55 PM	73006
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/6/2023 12:06:55 PM	73006
Surr: DNOP	124	69-147	%Rec	1	2/6/2023 12:06:55 PM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/4/2023 5:38:00 PM	GS9442 [,]
Surr: BFB	98.7	37.7-212	%Rec	1	2/4/2023 5:38:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.020	mg/Kg	1	2/4/2023 5:38:00 PM	BS94421
Toluene	ND	0.039	mg/Kg	1	2/4/2023 5:38:00 PM	BS94421
Ethylbenzene	ND	0.039	mg/Kg	1	2/4/2023 5:38:00 PM	BS94421
Xylenes, Total	ND	0.078	mg/Kg	1	2/4/2023 5:38:00 PM	BS94421
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	2/4/2023 5:38:00 PM	BS94421

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit

Page 19 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: SW-05
Project:	Chaco 147H	Collection Date: 2/3/2023 11:03:00 AM
Lab ID:	2302205-020	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 5:45:53 PM	73002
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst	SB
Diesel Range Organics (DRO)	23	9.7	mg/Kg	1	2/6/2023 12:20:33 PM	73006
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 12:20:33 PM	73006
Surr: DNOP	113	69-147	%Rec	1	2/6/2023 12:20:33 PM	73006
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	2/4/2023 5:57:00 PM	GS9442′
Surr: BFB	96.6	37.7-212	%Rec	1	2/4/2023 5:57:00 PM	GS9442′
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.022	mg/Kg	1	2/4/2023 5:57:00 PM	R94421
Toluene	ND	0.044	mg/Kg	1	2/4/2023 5:57:00 PM	R94421
Ethylbenzene	ND	0.044	mg/Kg	1	2/4/2023 5:57:00 PM	R94421
Xylenes, Total	ND	0.088	mg/Kg	1	2/4/2023 5:57:00 PM	R94421
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	2/4/2023 5:57:00 PM	R94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 20 of 28

Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302205

Date Reported: 2/10/2023

CLIENT:	ENSOLUM	Client Sample ID: SW-06
Project:	Chaco 147H	Collection Date: 2/3/2023 11:05:00 AM
Lab ID:	2302205-021	Matrix: MEOH (SOIL) Received Date: 2/4/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/4/2023 3:17:10 PM	73004
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst	DGH
Diesel Range Organics (DRO)	13	9.7	mg/Kg	1	2/6/2023 11:52:51 AM	73008
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/6/2023 11:52:51 AM	73008
Surr: DNOP	93.4	69-147	%Rec	1	2/6/2023 11:52:51 AM	73008
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/4/2023 7:55:00 PM	G94421
Surr: BFB	100	37.7-212	%Rec	1	2/4/2023 7:55:00 PM	G94421
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.019	mg/Kg	1	2/4/2023 7:55:00 PM	B94421
Toluene	ND	0.039	mg/Kg	1	2/4/2023 7:55:00 PM	B94421
Ethylbenzene	ND	0.039	mg/Kg	1	2/4/2023 7:55:00 PM	B94421
Xylenes, Total	ND	0.077	mg/Kg	1	2/4/2023 7:55:00 PM	B94421
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	2/4/2023 7:55:00 PM	B94421

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit
- RL

Page 21 of 28

L.							
Hall Env	vironmental Analysis Laboratory, Inc.		10-Feb-23				
Client:	ENSOLUM						

Project: Cha	co 147H
Sample ID: MB-73002	SampType: mblk TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 73002 RunNo: 94416
Prep Date: 2/4/2023	Analysis Date: 2/4/2023 SeqNo: 3411066 Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND 1.5
Sample ID: LCS-73002	SampType: Ics TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 73002 RunNo: 94416
Prep Date: 2/4/2023	Analysis Date: 2/4/2023 SeqNo: 3411067 Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14 1.5 15.00 0 95.2 90 110
Sample ID: MB-73004	SampType: mblk TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 73004 RunNo: 94417
Prep Date: 2/4/2023	Analysis Date: 2/4/2023 SeqNo: 3411174 Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND 1.5
Sample ID: LCS-73004	SampType: Ics TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 73004 RunNo: 94417
Prep Date: 2/4/2023	Analysis Date: 2/4/2023 SeqNo: 3411175 Units: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14 1.5 15.00 0 96.4 90 110

Qualifiers:

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

Page 22 of 28

Client ID: LCSS

Prep Date: 2/6/2023

QC SUMMARY REPORT Hall Envi

Batch ID: 73006

Analysis Date: 2/6/2023

Hall Env	ironment	al Analysis Laborat	ory, Inc. 10-Feb-23
Client: Project:	ENSOL Chaco 1		
Sample ID: L	CS-73006	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics

RunNo: 94419

SeqNo: 3411233

Units: mg/Kg

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.4	61.9	130			
Surr: DNOP	4.7		5.000		93.5	69	147			
Sample ID: MB-73006	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batcl	h ID: 73	006	F	RunNo: 9	4419				
Prep Date: 2/6/2023	Analysis E	Date: 2/	6/2023	S	SeqNo: 3	411235	Units: mg/#	٢g		
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	8.9		10.00		89.0	69	147			
Sample ID: MB-73008	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batc	h ID: 73	800	F	RunNo: 9	4419				
Prep Date: 2/6/2023	Analysis D	Date: 2/	6/2023	5	SeqNo: 3	411236	Units: mg/k	٢g		
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	8.8		10.00		88.2	69	147			
Sample ID: 2302205-001AMS	Samp1	Гуре: М	3	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: FS-02	Batc	h ID: 73	006	F	RunNo: 9	4419				
Prep Date: 2/6/2023	Analysis E	Date: 2/	6/2023	8	SeqNo: 3	411563	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.3	46.73	14.59	75.0	54.2	135			
Surr: DNOP	4.6		4.673		98.2	69	147			
Sample ID: 2302205-001AMS	D Samp1	Гуре: М	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: FS-02	Batc	h ID: 73	006	F	RunNo: 9	4419				
Prep Date: 2/6/2023	Analysis E	Date: 2/	6/2023	S	SeqNo: 3	411564	Units: mg/#	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.65	14.59	76.2	54.2	135	5.43	29.2	
Surr: DNOP	4.9		4.965		98.7	69	147	0	0	

Qualifiers:

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

WO#: 2302205 23

OC SUMMARY REPORT

Page	57	of	118
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Hall Enviro	WO#:	2302205 10-Feb-23	
Client: Project:	ENSOLUM Chaco 147H		

Sample ID: 2302	2205-021AMS	SampT	уре: МS	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: SW-	-06	Batch	ID: 73	800	F	RunNo: 9 4	4419				
Prep Date: 2/6	6/2023	Analysis D	ate: 2/	6/2023	S	SeqNo: 34	411566	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organi	ics (DRO)	47	9.9	49.31	12.58	69.7	54.2	135			
Surr: DNOP		5.4		4.931		109	69	147			
Sample ID: 2302	2205-021AMSD	SampT	ype: MS	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: SW-	-06	Batch	ID: 73	800	F	RunNo: 9 4	4419				
Prep Date: 2/6	6/2023	Analysis D	ate: 2/	6/2023	5	SeqNo: 34	411567	Units: mg/ #	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organi	ics (DRO)	47	9.6	47.94	12.58	70.9	54.2	135	0.807	29.2	
Surr: DNOP		4.9		4.794		103	69	147	0	0	
Sample ID: LCS	5-73008	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCS	S	Batch	ID: 73	800	F	RunNo: 9 4	4419				
Prep Date: 2/6	6/2023	Analysis D	ate: 2/	6/2023	5	SeqNo: 34	411569	Units: mg/ #	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Diesel Range Organi	ics (DRO)	Result 41	PQL 10	SPK value 50.00	SPK Ref Val	%REC 81.5	LowLimit 61.9	HighLimit 130	%RPD	RPDLimit	Qual

Qualifiers:

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

Page 24 of 28

QC SUMMARY Hall Environment			ory, Inc.					WO#:	230220 10-Feb-23
Client: ENSOLU Project: Chaco 14									
Sample ID: 2.5UG GRO LCS	SampType: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: R9	4421	F	RunNo: 9 4	4421				
Prep Date:	Analysis Date: 2/	4/2023	S	SeqNo: 34	411252	Units: %Red	•		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200	1000		124	37.7	212			
Sample ID: mb	SampType: M	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: GS	94421	F	RunNo: 9 4	4421				
Prep Date:	Analysis Date: 2/	4/2023	S	SeqNo: 34	411253	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	1000	1000		105	37.7	212			
Sample ID: 2.5UG GRO LCS	2 SampType: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch ID: R9	4421	F	RunNo: 9 4	4421				
Prep Date:	Analysis Date: 2/	4/2023	S	SeqNo: 34	411274	Units: %Red	;		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200	1000		120	37.7	212			
Sample ID: mb 2	SampType: M	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: G9	4421	F	RunNo: 94	4421				
Prep Date:	Analysis Date: 2/	4/2023	S	SeqNo: 34	411275	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5.0								
Surr: BFB	1100	1000		108	37.7	212			
Sample ID: 2302205-001ams	SampType: MS	6	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: FS-02	Batch ID: GS	94421	F	RunNo: 9 4	4421				
Prep Date:	Analysis Date: 2/	4/2023	S	SeqNo: 34	411279	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23 4.0	20.11	0	116	70	130			
Surr: BFB	940	804.5		116	37.7	212			

Sample ID: 2302205-001amsd	SampT	уре: М	SD	Test	Code: EF	PA Method	8015D: Gasc	oline Rang	e	
Client ID: FS-02	Batch	n ID: GS	94421	R	unNo: 94	4421				
Prep Date:	Analysis D	0ate: 2/	4/2023	S	eqNo: 34	411280	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.0	20.11	0	114	70	130	2.30	20	
Surr: BFB	930		804.5		116	37.7	212	0	0	

Qualifiers:

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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 standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 25 of 28

ENSOLUM

Client:

	WO#:	2302205
Hall Environmental Analysis Laboratory, Inc.		10-Feb-23

Project: Chaco 14	47H									
Sample ID: 2302205-021ams	SampT	ype: MS	5	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID: SW-06	Batch	ID: G9	4421	F	RunNo: 9 4	4421				
Prep Date:	Analysis D	ate: 2/	4/2023	S	SeqNo: 34	411281	Units: mg/#	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	3.9	19.26	0	112	70	130			
Surr: BFB	880		770.4		114	37.7	212			
Sample ID: 2302205-021ams	d SampT	ype: MS	SD	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Sample ID: 2302205-021ams Client ID: SW-06		ype: MS ID: G9			tCode: EF RunNo: 94		8015D: Gasc	oline Rang	е	
•		ID: G9	4421	F		4421	8015D: Gaso Units: mg/k	0	e	
Client ID: SW-06	Batch	ID: G9	4421 4/2023	F	RunNo: 94	4421		0	e RPDLimit	Qual
Client ID: SW-06 Prep Date:	Batch Analysis D	ID: G9 ate: 2/	4421 4/2023	F	RunNo: 9 4 SeqNo: 3 4	4421 411282	Units: mg/k	(g		Qual

Qualifiers:

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- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 26 of 28

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	2302205
	10-Feb-23

Client: ENSC	LUM									
Project: Chaco	147H									
Sample ID: 100ng btex Ics	Samo	Type: LC	S	Tos	tCode: F	PA Method	8021B: Vola	tilos		
Client ID: LCSS		h ID: BS		TestCode: EPA Method 8021B: Volatiles RunNo: 94421						
Prep Date:	Analysis I				SeqNo: 34		a			
							Units: mg/k	•		Qual
Analyte Benzene	Result 0.95	PQL 0.025	1.000	SPK Ref Val 0	%REC 94.5	LowLimit 80	HighLimit 120	%RPD	RPDLimit	Qual
Toluene	0.99	0.020	1.000	0	99.3	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1	0110	1.000	Ū	105	70	130			
Sample ID: mb	Samp	Туре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID: PBS		h ID: BS		F	RunNo: 9 4	4421				
Prep Date:	Analysis I	Date: 2/	4/2023	S	SeqNo: 34	411488	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			
Sample ID: 100ng btex lcs	s Samp	Туре: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Bato	h ID: B9	4421	RunNo: 94421						
Prep Date:	Analysis I	Date: 2/	4/2023	S	SeqNo: 34	411509	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.6	80	120			
Toluene	0.99	0.050	1.000	0	98.7	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			
Sample ID: mb 2	Samp	Туре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID: PBS	Bato	h ID: B9	4421	F	RunNo: 9 4	4421				
Prep Date:	Analysis I	Date: 2/	4/2023	S	SeqNo: 34	411510	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-		0.025								
Benzene	ND	0.020								
Benzene Toluene	ND ND	0.050								
		0.050 0.050								
Toluene	ND	0.050				70				

Qualifiers:

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- RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:ENSOLUMProject:Chaco 147H

Sample ID: 2302205-002ams	s SampType: MS TestCode: EPA Method 8021B: Volatiles										
Client ID: FS-05		h ID: BS		F							
Prep Date:	Analysis E	Date: 2/	4/2023	S	eqNo: 34	411514	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-butyl ether (MTBE)	0.81	0.091	0.9141	0	88.4	61.5	113				
Benzene	0.83	0.023	0.9141	0	90.4	68.8	120				
Toluene	0.87	0.046	0.9141	0	95.6	73.6	124				
Ethylbenzene	0.89	0.046	0.9141	0	96.9	72.7	129				
Xylenes, Total	2.7	0.091	2.742	0	97.2	75.7	126				
Surr: 4-Bromofluorobenzene	0.90		0.9141		98.0	70	130				
Sample ID: 2302205-002amsd	SampT	Гуре: МS	SD	Tes	tCode: EF	PA Method	8021B: Volat	tiles			
Client ID: FS-05	Batc	h ID: BS	94421	RunNo: 94421							
Prep Date:	Analysis E	Date: 2/	4/2023	SeqNo: 3411515			Units: mg/K	٤g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.79	0.023	0.9141	0	86.8	68.8	120	4.05	20		
Toluene	0.84	0.046	0.9141	0	91.8	73.6	124	4.06	20		
	0.05	0.046	0.9141	0	92.7	72.7	129	4.42	20		
Ethylbenzene	0.85	0.040	0.3141	0	02.1		-	=	20		
Ethylbenzene Xylenes, Total	0.85 2.6	0.048	2.742	0	93.5	75.7	126	3.89	20		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 28 of 28

WO#:	2302205
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10-Feb-23

HALL ENVIRO ANALY LABOR		L	TE	l Environmei L: 505-345-3 Vebsite: wwv	4901 Albuquerqu 975 FAX: 3	Hawki 1e, NM 505-345	ins NE 87109 5-4107	Sar	nple Log-In C	heck List
Client Name:	ENSOLUM		Work	Order Num	ber: 2302	205			RcptNo:	1
Received By: Completed By: Reviewed By:	Cheyenne Cheyenne	Cason		3 7:50:00 A 3 7:56:40 A			Ch Ch	al al		
Chain of Cust 1. Is Chain of Cus 2. How was the s	stody compl				Yes <u>Cour</u>		١	No 🗌	Not Present	
Log In 3. Was an attemp	ot made to c	ool the samp	es?		Yes		٨	10 🗆	NA 🗌	
4. Were all sampl	es received	at a tempera	ture of >0° C	to 6.0°C	Yes		٨	10 🗆	NA 🗆	
5. Sample(s) in p	roper contai	ner(s)?			Yes	\checkmark	٩	ło 🗌		
6. Sufficient samp	le volume fo	or indicated te	st(s)?		Yes		N	lo 🗌		
7. Are samples (e	xcept VOA a	and ONG) pro	perly preserve	ed?	Yes	\checkmark	N	lo 🗌		
8. Was preservati	ve added to	bottles?			Yes		N	lo 🗹	na 🗆	
9. Received at lea	ist 1 vial with	headspace	<1/4" for AQ \	/OA?	Yes		N	lo 🗌	NA 🗹	
10, Were any sam		-			Yes		٨	10 🗹		
11.Does paperwor (Note discrepar	k match bot	tle labels?			Yes		N	lo 🗌		>12 unless noted)
12. Are matrices co	prrectly ident	ified on Chai	n of Custody?		Yes	0.000.000			Adjusted?	
13. Is it clear what			?						Checked by:	me 2/4/23
14. Were all holding (If no, notify cu	•				Yes		N	lo 🗆	Checked by.	<u>ve an</u>
Special Handlin	ng (if app	licable)								
15. Was client not	ified of all di	screpancies v	vith this order	?	Yes		1	No 🗌	NA 🗹	
Person N By Whor Regardir Client In:	n:			Date Via:	: eMa	iil 🗌	Phone	🗌 Fax	🗌 In Person	
16. Additional rem	narks:									_
17. <u>Cooler Inform</u>	nation									
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Da	te	Signe	ed By		
1	0.9	Good	Yes	Morty						
2	1.8	Good	Yes	Morty						

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7956 1 of 2 Page 63 of 118		ANALYSIS LABORATORY	alle	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	°OS ; ; ; ; ;	ot MRS CB ^{,2}	d ' ² S02) MO 228 3082 3082 3082	3 ²) ³) 10 00 09 9/59	000 000 000 000 000 000 000 000 000 00	1150 1191 1191 1191 191 191 191 191 191 191	7 EEX, 98:H9 9081 F 9081 F 9081 F 9081 F 9081 C 920 (920 (92)														Remarks: CC, Chanson D. CnSolum. con		Astronited 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.
		Clandard X Rush Alendary	Project Name:	(1210)	Project #:	ALC: NOT THE REPORT OF THE REP	Project Manager: Brouke Hub	bheb a ensitem. con		: Reece Hanson	Yes		Cooler Temp(Including CF): 1, 8,-0, 2, 1, 8 (°C)	Container Preservative HEAL No.	I ype	1,402 6001 001	202	003	hod	(CCE	000		307	800	600	010	V CII	Received by: Vig: Date Time $2/3/2_2$ $15/1_3$	Received by: Via: Date Time M. C. M. J. M. 2140	contracted to other accredited laboratories. This serves as notice of the
Received by OCD: 4/3/2023 2:31:16 PM	hain-of-Custody Record	Client: Ensular, LLC	Herb	Mailing Address: 776 F 2nd Au	2 BI 301	Phone #: 970 - 403 - 6824	-ax#: bherb @ensolum.com	QA/QC Package:	Ctandard	npliance	Other	EDD (Type)			Date Lime Matrix Sample Name	2/202 50% FS-02	1128 1 F5-05	1148 55-06	F0-57 153	12.03 F5-12	1206 755-13	11208 / RHT9-15	[1476 FS - 0313	V 1940 FS-04B	213/53 1007 FS-08 B	1 1010 F5 - 0913	V 1320 V FS -10B	Date: Time: Relinquished by:	Time: Relino	if necessary, samp

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Received by OCD: 4/3/2023 2:31:16 PM		page 2 3 7 2 Page 64 of 118
Chain-of-Custody Record	Turn-Around Time: (2/6/23)	
Client: Ensolum, LLC	X Rush	ANALYSIS LABORATORY
Atta: Broshe Hub		www.hallenvironmental.com
Mailing Address:	Charo	4901 Hawkins NE - Albuquerque, NM 87109
	Project #:	Tel. 505-345-3975 Fax 505-345-4107
Phone #:	ALL REPORT OF THE REPORT OF TH	Analysis Request
email or Fax#: bhob @ encol a cor	Project Manager: Brooke Herb	*OS
QA/QC Package:		SMIS SIMS (802 (802
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If necessary, samples submitted to Hall Environmental may be Released to Imaging: 4711/2023 9:02:21 AM	subcontracted to other accredited laboratories. This serves as notice of this	Released to Imaging: 47172023 9:02:21 AM



February 13, 2023

Brooke Herb ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Chaco 147H

OrderNo.: 2302327

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 9 sample(s) on 2/8/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT:	ENSOLUM	С	lient Sample ID: FS-19B
Project:	Chaco 147H		Collection Date: 2/7/2023 11:30:00 AM
Lab ID:	2302327-001	Matrix: MEOH (SOIL)	Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 11:30:49 AM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/8/2023 12:02:22 PM	73070
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	2/8/2023 12:02:22 PM	73070
Surr: DNOP	102	69-147	%Rec	1	2/8/2023 12:02:22 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	2/8/2023 11:15:00 AM	GS94465
Surr: BFB	95.4	37.7-212	%Rec	1	2/8/2023 11:15:00 AM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.017	mg/Kg	1	2/8/2023 11:15:00 AM	BS94465
Toluene	ND	0.035	mg/Kg	1	2/8/2023 11:15:00 AM	BS94465
Ethylbenzene	ND	0.035	mg/Kg	1	2/8/2023 11:15:00 AM	BS94465
Xylenes, Total	ND	0.070	mg/Kg	1	2/8/2023 11:15:00 AM	BS94465
Surr: 4-Bromofluorobenzene	95.5	70-130	%Rec	1	2/8/2023 11:15:00 AM	BS94465

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit
- RL Re

Page 1 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT:	ENSOLUM	С	Client Sample ID: FS-26B
<b>Project:</b>	Chaco 147H		Collection Date: 2/7/2023 11:35:00 AM
Lab ID:	2302327-002	Matrix: MEOH (SOIL)	Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 11:43:14 AM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	82	14	mg/Kg	1	2/8/2023 12:16:01 PM	73070
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/8/2023 12:16:01 PM	73070
Surr: DNOP	103	69-147	%Rec	1	2/8/2023 12:16:01 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	2/8/2023 11:34:00 AM	GS94465
Surr: BFB	99.2	37.7-212	%Rec	1	2/8/2023 11:34:00 AM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.020	mg/Kg	1	2/8/2023 11:34:00 AM	BS94465
Toluene	ND	0.040	mg/Kg	1	2/8/2023 11:34:00 AM	BS94465
Ethylbenzene	ND	0.040	mg/Kg	1	2/8/2023 11:34:00 AM	BS94465
Xylenes, Total	ND	0.080	mg/Kg	1	2/8/2023 11:34:00 AM	BS94465
Surr: 4-Bromofluorobenzene	97.0	70-130	%Rec	1	2/8/2023 11:34:00 AM	BS94465

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: FS-15C
Project: Chaco 147H	Collection Date: 2/7/2023 12:30:00 PM
Lab ID: 2302327-003	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 11:55:39 AM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	2/8/2023 12:29:36 PM	73070
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/8/2023 12:29:36 PM	73070
Surr: DNOP	98.8	69-147	%Rec	1	2/8/2023 12:29:36 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	2/8/2023 11:54:00 AM	GS94465
Surr: BFB	98.1	37.7-212	%Rec	1	2/8/2023 11:54:00 AM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.017	mg/Kg	1	2/8/2023 11:54:00 AM	BS94465
Toluene	ND	0.035	mg/Kg	1	2/8/2023 11:54:00 AM	BS94465
Ethylbenzene	ND	0.035	mg/Kg	1	2/8/2023 11:54:00 AM	BS94465
Xylenes, Total	ND	0.070	mg/Kg	1	2/8/2023 11:54:00 AM	BS94465
Surr: 4-Bromofluorobenzene	97.5	70-130	%Rec	1	2/8/2023 11:54:00 AM	BS94465

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: SW-03S
Project: Chaco 147H	Collection Date: 2/7/2023 1:50:00 PM
Lab ID: 2302327-004	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 12:08:03 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/8/2023 12:43:01 PM	73070
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/8/2023 12:43:01 PM	73070
Surr: DNOP	121	69-147	%Rec	1	2/8/2023 12:43:01 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/8/2023 12:14:00 PM	GS94465
Surr: BFB	97.5	37.7-212	%Rec	1	2/8/2023 12:14:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.025	mg/Kg	1	2/8/2023 12:14:00 PM	BS94465
Toluene	ND	0.050	mg/Kg	1	2/8/2023 12:14:00 PM	BS94465
Ethylbenzene	ND	0.050	mg/Kg	1	2/8/2023 12:14:00 PM	BS94465
Xylenes, Total	ND	0.10	mg/Kg	1	2/8/2023 12:14:00 PM	BS94465
Surr: 4-Bromofluorobenzene	95.5	70-130	%Rec	1	2/8/2023 12:14:00 PM	BS94465

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit

Page 4 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: SW-03N
Project: Chaco 147H	Collection Date: 2/7/2023 1:55:00 PM
Lab ID: 2302327-005	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 12:20:27 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	20	15	mg/Kg	1	2/8/2023 12:56:50 PM	73070
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/8/2023 12:56:50 PM	73070
Surr: DNOP	117	69-147	%Rec	1	2/8/2023 12:56:50 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analyst	ССМ
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	2/8/2023 12:33:00 PM	GS94465
Surr: BFB	94.5	37.7-212	%Rec	1	2/8/2023 12:33:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analyst	ССМ
Benzene	ND	0.021	mg/Kg	1	2/8/2023 12:33:00 PM	BS94465
Toluene	ND	0.041	mg/Kg	1	2/8/2023 12:33:00 PM	BS94465
Ethylbenzene	ND	0.041	mg/Kg	1	2/8/2023 12:33:00 PM	BS94465
Xylenes, Total	ND	0.082	mg/Kg	1	2/8/2023 12:33:00 PM	BS94465
Surr: 4-Bromofluorobenzene	90.3	70-130	%Rec	1	2/8/2023 12:33:00 PM	BS94465

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit

Page 5 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: FS-20B
Project: Chaco 147H	Collection Date: 2/7/2023 2:40:00 PM
Lab ID: 2302327-006	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 12:57:42 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	ND	13	mg/Kg	1	2/8/2023 1:10:31 PM	73070
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	2/8/2023 1:10:31 PM	73070
Surr: DNOP	118	69-147	%Rec	1	2/8/2023 1:10:31 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/8/2023 12:53:00 PM	GS94465
Surr: BFB	94.1	37.7-212	%Rec	1	2/8/2023 12:53:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.024	mg/Kg	1	2/8/2023 12:53:00 PM	BS94465
Toluene	ND	0.048	mg/Kg	1	2/8/2023 12:53:00 PM	BS94465
Ethylbenzene	ND	0.048	mg/Kg	1	2/8/2023 12:53:00 PM	BS94465
Xylenes, Total	ND	0.095	mg/Kg	1	2/8/2023 12:53:00 PM	BS94465
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	2/8/2023 12:53:00 PM	BS94465

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 6 of 13

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: FS-21B
Project: Chaco 147H	Collection Date: 2/7/2023 2:43:00 PM
Lab ID: 2302327-007	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	
Chloride	ND	60	mg/Kg	20	2/8/2023 1:10:06 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	DGH
Diesel Range Organics (DRO)	120	15	mg/Kg	1	2/8/2023 1:24:07 PM	73070
Motor Oil Range Organics (MRO)	60	50	mg/Kg	1	2/8/2023 1:24:07 PM	73070
Surr: DNOP	116	69-147	%Rec	1	2/8/2023 1:24:07 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analyst	CCM
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	2/8/2023 1:13:00 PM	GS94465
Surr: BFB	116	37.7-212	%Rec	1	2/8/2023 1:13:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analyst	CCM
Benzene	ND	0.023	mg/Kg	1	2/8/2023 1:13:00 PM	BS94465
Toluene	ND	0.045	mg/Kg	1	2/8/2023 1:13:00 PM	BS94465
Ethylbenzene	ND	0.045	mg/Kg	1	2/8/2023 1:13:00 PM	BS94465
Xylenes, Total	ND	0.091	mg/Kg	1	2/8/2023 1:13:00 PM	BS94465
Surr: 4-Bromofluorobenzene	95.3	70-130	%Rec	1	2/8/2023 1:13:00 PM	BS94465

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit

Page 7 of 13

D Sample Diluted Due to Matrix

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: FS-22B
<b>Project:</b>	Chaco 147H	Collection Date: 2/7/2023 2:48:00 PM
Lab ID:	2302327-008	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	60	mg/Kg	20	2/8/2023 1:22:30 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	2/8/2023 3:27:00 PM	73070
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/8/2023 3:27:00 PM	73070
Surr: DNOP	114	69-147	%Rec	1	2/8/2023 3:27:00 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	2/8/2023 1:32:00 PM	GS94465
Surr: BFB	95.5	37.7-212	%Rec	1	2/8/2023 1:32:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.018	mg/Kg	1	2/8/2023 1:32:00 PM	BS94465
Toluene	ND	0.036	mg/Kg	1	2/8/2023 1:32:00 PM	BS94465
Ethylbenzene	ND	0.036	mg/Kg	1	2/8/2023 1:32:00 PM	BS94465
Xylenes, Total	ND	0.072	mg/Kg	1	2/8/2023 1:32:00 PM	BS94465
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	2/8/2023 1:32:00 PM	BS94465

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 8 of 13

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302327

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: FS-23B
<b>Project:</b>	Chaco 147H	<b>Collection Date:</b> 2/7/2023 2:51:00 PM
Lab ID:	2302327-009	Matrix: MEOH (SOIL) Received Date: 2/8/2023 7:50:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: NAI
Chloride	ND	59	mg/Kg	20	2/8/2023 1:34:54 PM	73076
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: DGH
Diesel Range Organics (DRO)	17	13	mg/Kg	1	2/8/2023 1:51:26 PM	73070
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	2/8/2023 1:51:26 PM	73070
Surr: DNOP	113	69-147	%Rec	1	2/8/2023 1:51:26 PM	73070
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	2/8/2023 1:52:00 PM	GS94465
Surr: BFB	93.8	37.7-212	%Rec	1	2/8/2023 1:52:00 PM	GS94465
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.022	mg/Kg	1	2/8/2023 1:52:00 PM	BS94465
Toluene	ND	0.044	mg/Kg	1	2/8/2023 1:52:00 PM	BS94465
Ethylbenzene	ND	0.044	mg/Kg	1	2/8/2023 1:52:00 PM	BS94465
Xylenes, Total	ND	0.089	mg/Kg	1	2/8/2023 1:52:00 PM	BS94465
Surr: 4-Bromofluorobenzene	93.9	70-130	%Rec	1	2/8/2023 1:52:00 PM	BS94465

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 9 of 13

Client: Project:	ENSOL Chaco 1								
Sample ID:	MB-73076	SampType:	MBLK	Tes	tCode: EPA Meth	od 300.0: Anions	8		
Client ID:	PBS	Batch ID:	73076	F	RunNo: <b>94475</b>				
Prep Date:	2/8/2023	Analysis Date:	2/8/2023	S	SeqNo: 3414519	Units: <b>mg/K</b>	g		
Analyte		Result PQ	_ SPK value	SPK Ref Val	%REC LowLii	nit HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1	5						
Sample ID:	LCS-73076	SampType:	_CS	Tes	tCode: EPA Meth	od 300.0: Anions	S		
Client ID:	LCSS	Batch ID:	73076	F	RunNo: <b>94475</b>				
Prep Date:	2/8/2023	Analysis Date:	2/8/2023	S	SeqNo: <b>3414520</b>	Units: <b>mg/K</b>	g		
Analyte		Result PQ	_ SPK value	SPK Ref Val	%REC LowLii	nit HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1	5 15.00	0	93.8	90 110			

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

Page 10 of 13

2302327

13-Feb-23

WO#:

Client: ENSOL	-									
Project: Chaco	147H									
Sample ID: MB-73070	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	n ID: <b>730</b>	)70	F	RunNo: <b>9</b> 4	476				
Prep Date: 2/8/2023	Analysis D	Date: 2/8	8/2023	S	SeqNo: <b>3</b> 4	13844	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.7	69	147			
Sample ID: LCS-73070	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	n ID: <b>730</b>	)70	F	RunNo: <b>9</b> 4	476				
Prep Date: 2/8/2023	Analysis D	Date: 2/8	8/2023	S	SeqNo: 34	13845	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	15	50.00	0	119	61.9	130			
Surr: DNOP	4.4		5.000		88.1	69	147			

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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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Page 11 of 13

2302327

13-Feb-23

WO#:

**ENSOLUM** 

Chaco 147H

**Client:** 

**Project:** 

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Sample ID: 2.5ug gro Ics	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: LCSS	Batch	n ID: <b>GS</b>	94465	F	RunNo: <b>9</b> 4	4465				
Prep Date:	Analysis D	)ate: 2/8	8/2023	S	SeqNo: 34	413467	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	72.3	137			
Surr: BFB	1100		1000		112	37.7	212			
Sample ID: <b>mb</b>	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: PBS	Batch	n ID: <b>GS</b>	94465	F	RunNo: <b>9</b> 4	1465				
Prep Date:	Analysis D	)ate: 2/8	8/2023	S	SeqNo: 34	413637	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	37.7	212			
Sample ID: 2302327-002ams	Comm									
Sample ID. 2302321-002ams	Sampi	ype: MS	5	les	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: <b>FS-26B</b>		ype: MS 1 ID: GS			tCode: EF RunNo: 94		8015D: Gaso	line Range		
		n ID: GS	94465	F		1465	8015D: Gasol Units: mg/K	U		
Client ID: FS-26B	Batch	n ID: GS	94465 8/2023	F	RunNo: <b>9</b> 4	1465		U	RPDLimit	Qual
Client ID: <b>FS-26B</b> Prep Date:	Batch Analysis D	n ID: GS Date: 2/8	94465 8/2023	F	RunNo: <b>9</b> 4 SeqNo: <b>3</b> 4	1465 114653	Units: <b>mg/K</b>	g		Qual
Client ID: <b>FS-26B</b> Prep Date: Analyte	Batch Analysis D Result	n ID: <b>GS</b> Date: <b>2/8</b> PQL	94465 8/2023 SPK value	F S SPK Ref Val	RunNo: 94 SeqNo: 34 %REC	1465 114653 LowLimit	Units: <b>mg/K</b> HighLimit	g		Qual
Client ID: <b>FS-26B</b> Prep Date: Analyte Gasoline Range Organics (GRO)	Batch Analysis E Result 30 1200	n ID: <b>GS</b> Date: <b>2/8</b> PQL	94465 8/2023 SPK value 25.00 1000	F SPK Ref Val	RunNo: 94 SeqNo: 34 %REC 119 119	4465 414653 LowLimit 70 37.7	Units: <b>mg/K</b> HighLimit 130	g %RPD	RPDLimit	Qual
Client ID: <b>FS-26B</b> Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB	Batch Analysis E Result 30 1200 SampT	Date: 2/4 PQL 5.0	94465 8/2023 SPK value 25.00 1000	F SPK Ref Val 0 Tes	RunNo: 94 SeqNo: 34 %REC 119 119	1465 114653 LowLimit 70 37.7 PA Method	Units: <b>mg/K</b> HighLimit 130 212	g %RPD	RPDLimit	Qual
Client ID: <b>FS-26B</b> Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>2302327-002amsd</b>	Batch Analysis E Result 30 1200 SampT	PQL 5.0 Type: MS	94465 8/2023 SPK value 25.00 1000 6D 94465	F SPK Ref Val 0 Tes F	RunNo: 94 SeqNo: 34 %REC 119 119 tCode: EF	1465 114653 LowLimit 70 37.7 PA Method 1465	Units: <b>mg/K</b> HighLimit 130 212	g %RPD	RPDLimit	Qual
Client ID: FS-26B Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: 2302327-002amsd Client ID: FS-26B	Batch Analysis E Result 30 1200 SampT Batch	PQL 5.0 Type: MS	94465 8/2023 SPK value 25.00 1000 5D 94465 8/2023	F SPK Ref Val 0 Tes F	RunNo: 94 SeqNo: 34 %REC 119 119 tCode: EF RunNo: 94	1465 114653 LowLimit 70 37.7 PA Method 1465	Units: mg/K HighLimit 130 212 8015D: Gaso	g %RPD	RPDLimit	Qual
Client ID: FS-26B Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: 2302327-002amsd Client ID: FS-26B Prep Date:	Batch Analysis D Result 30 1200 SampT Batch Analysis D	PQL 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	94465 8/2023 SPK value 25.00 1000 5D 94465 8/2023	F SPK Ref Val 0 Tes F	RunNo: 94 SeqNo: 34 %REC 119 119 tCode: EF RunNo: 94 SeqNo: 34	1465 114653 LowLimit 70 37.7 PA Method 1465 114654	Units: mg/K HighLimit 130 212 8015D: Gasol Units: mg/K	g %RPD line Range	RPDLimit	

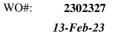
Qualifiers:

- * Value exceeds Maximum Contaminant Level.
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- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 12 of 13



**ENSOLUM** 

Chaco 147H

**Client:** 

**Project:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Sample ID: 100ng btex Ics	Samp	Type: LC	s	Tes	stCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: <b>BS</b>	94465	F	RunNo: <b>9</b> 4	1465				
Prep Date:	Analysis I	Date: 2/8	3/2023	\$	SeqNo: 34	413468	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			
Sample ID: <b>mb</b>	Samp	Туре: <b>МВ</b>	LK	Tes	stCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBS	Batc	h ID: <b>BS</b>	94465	F	RunNo: <b>9</b> 4	1465				
Prep Date:	Analysis I	Date: 2/8	3/2023	\$	SeqNo: 34	413638	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: 4-Bromofluorobenzene	1.0		1.000		102	70	130			
Sample ID: 2302327-001ams	Samp	Туре: <b>МЅ</b>	i	Tes	stCode: EF	PA Method	8021B: Volat	iles		
Sample ID: 2302327-001ams Client ID: FS-19B		Type: <b>MS</b> h ID: <b>BS</b>			stCode: <b>EF</b> RunNo: <b>9</b> 4		8021B: Volat	iles		
		h ID: BS	94465	F		1465	8021B: Volat Units: mg/k			
Client ID: FS-19B	Batc	h ID: BS	94465 3/2023	F	RunNo: <b>9</b> 4	1465			RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date:	Batc Analysis I	h ID: <b>BS</b> Date: 2/8	94465 3/2023	F	RunNo: 94 SeqNo: 34	1465 114744	Units: <b>mg/k</b>	g	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte	Batc Analysis I Result	h ID: <b>BS</b> Date: 2/8 PQL	94465 3/2023 SPK value	F SPK Ref Val	RunNo: 94 SeqNo: 34 %REC	1465 114744 LowLimit	Units: <b>mg/k</b> HighLimit	g	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene	Batc Analysis I Result 0.95	h ID: <b>BS</b> Date: 2/8 PQL 0.025	94465 3/2023 SPK value 1.000	F SPK Ref Val 0	RunNo: 94 SeqNo: 34 %REC 95.5	1465 114744 LowLimit 68.8	Units: <b>mg/k</b> HighLimit 120	g	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene	Batc Analysis I Result 0.95 0.96	h ID: <b>BS</b> Date: 2/8 PQL 0.025 0.050	94465 3/2023 SPK value 1.000 1.000	F SPK Ref Val 0 0	RunNo: 94 SeqNo: 34 %REC 95.5 95.6	4465 414744 LowLimit 68.8 73.6	Units: <b>mg/k</b> HighLimit 120 124	g	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene	Batc Analysis I Result 0.95 0.96 0.94	h ID: <b>BS</b> Date: <b>2/8</b> <u>PQL</u> 0.025 0.050 0.050	94465 3/2023 SPK value 1.000 1.000 1.000	F SPK Ref Val 0 0 0	RunNo: <b>9</b> 4 SeqNo: <b>3</b> 4 <u>%REC</u> 95.5 95.6 94.1	4465 414744 LowLimit 68.8 73.6 72.7	Units: <b>mg/k</b> HighLimit 120 124 129	g	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Batc Analysis I Result 0.95 0.96 0.94 2.8 0.92	h ID: <b>BS</b> Date: <b>2/8</b> <u>PQL</u> 0.025 0.050 0.050	94465 3/2023 SPK value 1.000 1.000 1.000 3.000 1.000	F SPK Ref Val 0 0 0 0	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6	4465 414744 LowLimit 68.8 73.6 72.7 75.7 70	Units: <b>mg/k</b> HighLimit 120 124 129 126	<b>g</b> %RPD	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	Batc Analysis I Result 0.95 0.96 0.94 2.8 0.92 Samp	h ID: <b>BS</b> Date: <b>2/8</b> PQL 0.025 0.050 0.050 0.10	94465 3/2023 SPK value 1.000 1.000 3.000 1.000	F SPK Ref Val 0 0 0 0 0 Tes	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6	4465 414744 LowLimit 68.8 73.6 72.7 75.7 70 PA Method	Units: <b>mg/k</b> HighLimit 120 124 129 126 130	<b>g</b> %RPD	RPDLimit	Qual
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2302327-001amso</b>	Analysis I Result 0.95 0.96 0.94 2.8 0.92 Samp Batc	h ID: BS Date: 2/8 PQL 0.025 0.050 0.050 0.10	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 5D 94465	F SPK Ref Val 0 0 0 0 Tes F	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6 stCode: EF	4465 414744 68.8 73.6 72.7 75.7 70 PA Method 4465	Units: <b>mg/k</b> HighLimit 120 124 129 126 130	íg %RPD iles	RPDLimit	Qual
Client ID: FS-19B Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302327-001amso Client ID: FS-19B	Analysis I Result 0.95 0.96 0.94 2.8 0.92 Samp Batc	h ID: <b>BS</b> Date: <b>2/8</b> PQL 0.025 0.050 0.050 0.10 Type: <b>MS</b> h ID: <b>BS</b>	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 5D 94465 3/2023	F SPK Ref Val 0 0 0 0 Tes F	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6 stCode: EF RunNo: 94	4465 414744 68.8 73.6 72.7 75.7 70 PA Method 4465	Units: mg/k HighLimit 120 124 129 126 130 8021B: Volat	íg %RPD iles	RPDLimit	Qual
Client ID: FS-19B Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302327-001amso Client ID: FS-19B Prep Date:	Analysis I Result 0.95 0.96 0.94 2.8 0.92 d Samp Bato Analysis I	h ID: BS Date: 2/8 PQL 0.025 0.050 0.050 0.10 Type: MS h ID: BS Date: 2/8	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 5D 94465 3/2023	F SPK Ref Val 0 0 0 0 0 Tes F	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6 stCode: EF RunNo: 94 SeqNo: 34	4465 414744 LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4465 414750	Units: mg/k HighLimit 120 124 129 126 130 8021B: Volat Units: mg/k	Sg %RPD iles		
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302327-001amsc Client ID: <b>FS-19B</b> Prep Date: Analyte	Analysis I Result 0.95 0.96 0.94 2.8 0.92 g Samp Bato Analysis I Result	h ID: <b>BS</b> Date: <b>2/8</b> PQL 0.025 0.050 0.050 0.10 Type: <b>MS</b> Date: <b>2/8</b> PQL	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 5D 94465 3/2023 SPK value	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val	RunNo: 94 SeqNo: 34 %REC 95.5 95.6 94.1 94.3 91.6 stCode: EF RunNo: 94 SeqNo: 34 %REC	4465 414744 68.8 73.6 72.7 75.7 70 PA Method 4465 414750 LowLimit	Units: <b>mg/k</b> HighLimit 120 124 129 126 130 <b>8021B: Volat</b> Units: <b>mg/k</b> HighLimit	Sg %RPD iles Sg %RPD	RPDLimit	
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2302327-001amsc</b> Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene	Analysis I Result 0.95 0.96 0.94 2.8 0.92 d Samp Batc Analysis I Result 0.89	h ID: <b>BS</b> Date: <b>2/8</b> PQL 0.025 0.050 0.050 0.10 Type: <b>MS</b> h ID: <b>BS</b> Date: <b>2/8</b> PQL 0.025	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 5D 94465 3/2023 SPK value 1.000	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val 0	RunNo: 94 SeqNo: 34 95.5 95.6 94.1 94.3 91.6 stCode: EF RunNo: 94 SeqNo: 34 SeqNo: 34 %REC 89.3	4465 414744 LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4465 414750 LowLimit 68.8	Units: mg/k HighLimit 120 124 129 126 130 8021B: Volat Units: mg/k HighLimit 120	5g %RPD iles 5g %RPD 6.68	RPDLimit 20	
Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Client ID: <b>FS-19B</b> Prep Date: Analyte Benzene Toluene	Analysis I Result 0.95 0.96 0.94 2.8 0.92 d Samp Batc Analysis I Result 0.89 0.90	h ID: BS Date: 2/8 PQL 0.025 0.050 0.050 0.10 Type: MS h ID: BS Date: 2/8 PQL 0.025 0.050	94465 3/2023 SPK value 1.000 1.000 3.000 1.000 3.000 1.000 3/2023 SPK value 1.000 1.000	SPK Ref Val 0 0 0 0 0 Tes 5 SPK Ref Val 0 0	RunNo: 94 SeqNo: 34 95.5 95.6 94.1 94.3 91.6 stCode: EF RunNo: 94 SeqNo: 34 %REC 89.3 89.6	4465 414744 68.8 73.6 72.7 75.7 70 24 Method 4465 414750 LowLimit 68.8 73.6	Units: mg/k HighLimit 120 124 129 126 130 8021B: Volat Units: mg/k HighLimit 120 124	5g %RPD iles 5g %RPD 6.68 6.42	RPDLimit 20 20	

## 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 ND
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- в Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL
  - Reporting Limit

Page 13 of 13

WO#: 2302327 13-Feb-23

ANAL	RONMENTAL YSIS RATORY	Hall Environme TEL: 505-345- Website: ww	490 Albuquero 3975 FAX:	)1 Hawkins N que, NM 8710	re 09 <b>Sa</b> 07	ample L	.og-In Cl	heck List
Client Name:	ENSOLUM	Work Order Num	nber: 230	2327			RcptNo:	1
Received By: Completed By: Reviewed By:	Sean Livingston Sean Livingston A 2-8-23	2/7/2023 5:18:00 F 2/8/2023 8:02:45 F			S	Lost Lost		
Chain of Cus	stody							
1. Is Chain of C	custody complete?		Yes	$\checkmark$	No [	Not I	Present	
2. How was the	sample delivered?		<u>Cou</u>	<u>rier</u>				
<u>Log In</u> 3. Was an atter	npt made to cool the sampl	es?	Yes		No [	]	NA 🗌	
4. Were all sam	ples received at a temperat	ure of >0° C to 6.0°C	Yes		No [	ב	na 🗆	
5. Sample(s) in	proper container(s)?		Yes		No 🗌	]		
6. Sufficient san	nple volume for indicated te	st(s)?	Yes		No 🗌	]		
7 Are samples	(except VOA and ONG) pro	perly preserved?	Yes		No 🗌	]		
8. Was preserva	ative added to bottles?		Yes		No 🗹	]	NA 🗌	
9. Received at le	east 1 vial with headspace <	<1/4" for AQ VOA?	Yes		No 🗌	]	NA 🗹	
10. Were any sa	mple containers received br	oken?	Yes		No 🗹	# of pre		
	ork match bottle labels? ancies on chain of custody)		Yes		No 🗌	] for pH:	checked (<2 or >	>12 unless noted)
12. Are matrices	correctly identified on Chair	of Custody?	Yes		No 🗌	]   A	djusted?	
13. Is it clear what	t analyses were requested?	)		$\checkmark$	No 🗌			2/0/
	ing times able to be met? sustomer for authorization.)		Yes		No 🗌	er	necked by:	~218123
Special Hand	ling (if applicable)							
15. Was client no	otified of all discrepancies w	ith this order?	Yes		No 🗌	]	NA 🗹	
Person	Notified:	Date	Г	and not set of the		-		
By Wh	om:	Via:	eM	ail 🗌 Pho	ne 🗌 F	ax 📋 In Pe	erson	
Regard	ling:							
Client I	nstructions:							
16. Additional re	marks:							
17. Cooler Info	mation							

Page 79 of 118

Cooler No

1

2

Temp °C

0.2

0.7

Condition

Good

Good

Seal Intact Seal No

Not Present YOGI

Not Present YOGI

Seal Date

Signed By

Md
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accepted by OOD. TOTADAD ANTITU LIN		1 486 00 01 110
Chain-of-Custody Record	Turn-Around Time: $(2/8/73)$	
Client: Engs I and , LLC	Rush Mext Change	
		www.hallenvironmental.com
Mailing Address: ナチ E ビンイ Arc	Chaco 141717	4901 Hawkins NE - Albuquerque, NM 87109
Durays, 60 81301	Project #:	Tel. 505-345-3975 Fax 505-345-4107
Phone #:		Analysis Request
	Project Manager: 3 Soule 1406	
ige:	black Cercolan - com	s'80 SMI SMI
Standard Devel 4 (Full Validation)		50, 50, 50, 50, 50, 50, 50, 50, 50, 50,
ë	" Reece Ho	) 8082 827 827 827
NELAC      Other	C Yes	08 504 10 01 10 01 10 10 10 10 10
EDD (Type)	# of Coolers: Z 0.G + 0. ( = 0.C	)(G 31(G 310 310 310 310 310 310 310 310 310 310
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1230 FS-15C	200	
1350 SW-035	NOU	
1355 SW - 03N	SoC	
1440 F5 - 20 B	20C	
1443 FS-2113	49	
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Date: Time: Relinquished by:	aived by: Via: 2 - 1 Airs	
, samples	bcontracted to other accredited laboratories. This serves as notice of th	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.

Released to Imaging: \$3,172023 9:02:21 AM

•



February 13, 2023

Brooke Herb ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Chaco 147H

OrderNo.: 2302429

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 12 sample(s) on 2/9/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-24B
<b>Project:</b>	Chaco 147H	Collection Date: 2/8/2023 11:48:00 AM
Lab ID:	2302429-001	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 11:07:46 AM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	t: mb
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/9/2023 11:40:02 AM	73100
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/9/2023 11:40:02 AM	73100
Surr: DNOP	119	69-147	%Rec	1	2/9/2023 11:40:02 AM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analyst	t: CCM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	2/9/2023 11:18:00 AM	GS94497
Surr: BFB	94.5	37.7-212	%Rec	1	2/9/2023 11:18:00 AM	GS94497
EPA METHOD 8021B: VOLATILES					Analyst	t: CCM
Benzene	ND	0.020	mg/Kg	1	2/9/2023 11:18:00 AM	BS94497
Toluene	ND	0.039	mg/Kg	1	2/9/2023 11:18:00 AM	BS94497
Ethylbenzene	ND	0.039	mg/Kg	1	2/9/2023 11:18:00 AM	BS94497
Xylenes, Total	ND	0.078	mg/Kg	1	2/9/2023 11:18:00 AM	BS94497
Surr: 4-Bromofluorobenzene	92.7	70-130	%Rec	1	2/9/2023 11:18:00 AM	BS94497

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range RL Reporting Limit

Page 1 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: ENSOLU	M Client Sample ID: FS-25B
Project: Chaco 14	Collection Date: 2/8/2023 11:53:00 AM
Lab ID: 2302429-	002 Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 11:20:11 AM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	: mb
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/9/2023 11:54:10 AM	73100
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/9/2023 11:54:10 AM	73100
Surr: DNOP	119	69-147	%Rec	1	2/9/2023 11:54:10 AM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	CCM
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	2/9/2023 11:38:00 AM	GS94497
Surr: BFB	102	37.7-212	%Rec	1	2/9/2023 11:38:00 AM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	CCM
Benzene	ND	0.022	mg/Kg	1	2/9/2023 11:38:00 AM	BS94497
Toluene	ND	0.045	mg/Kg	1	2/9/2023 11:38:00 AM	BS94497
Ethylbenzene	ND	0.045	mg/Kg	1	2/9/2023 11:38:00 AM	BS94497
Xylenes, Total	ND	0.090	mg/Kg	1	2/9/2023 11:38:00 AM	BS94497
Surr: 4-Bromofluorobenzene	94.7	70-130	%Rec	1	2/9/2023 11:38:00 AM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- RL Reporting Limit

Page 2 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: FS-27B
Project: Chaco 147H	Collection Date: 2/8/2023 12:20:00 PM
Lab ID: 2302429-003	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 11:32:36 AM	73097
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analys	t: mb
Diesel Range Organics (DRO)	20	15	mg/Kg	1	2/9/2023 12:08:29 PM	73100
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/9/2023 12:08:29 PM	73100
Surr: DNOP	117	69-147	%Rec	1	2/9/2023 12:08:29 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	2/9/2023 11:57:00 AM	GS94497
Surr: BFB	102	37.7-212	%Rec	1	2/9/2023 11:57:00 AM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.020	mg/Kg	1	2/9/2023 11:57:00 AM	BS94497
Toluene	ND	0.041	mg/Kg	1	2/9/2023 11:57:00 AM	BS94497
Ethylbenzene	ND	0.041	mg/Kg	1	2/9/2023 11:57:00 AM	BS94497
Xylenes, Total	ND	0.081	mg/Kg	1	2/9/2023 11:57:00 AM	BS94497
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	2/9/2023 11:57:00 AM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-28B
<b>Project:</b>	Chaco 147H	Collection Date: 2/8/2023 12:23:00 PM
Lab ID:	2302429-004	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 11:45:00 AM	73097
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: mb
Diesel Range Organics (DRO)	280	15	mg/Kg	1	2/9/2023 12:22:24 PM	73100
Motor Oil Range Organics (MRO)	89	49	mg/Kg	1	2/9/2023 12:22:24 PM	73100
Surr: DNOP	109	69-147	%Rec	1	2/9/2023 12:22:24 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	18	14	mg/Kg	5	2/9/2023 12:37:00 PM	GS94497
Surr: BFB	160	37.7-212	%Rec	5	2/9/2023 12:37:00 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.072	mg/Kg	5	2/9/2023 12:37:00 PM	BS94497
Toluene	ND	0.14	mg/Kg	5	2/9/2023 12:37:00 PM	BS94497
Ethylbenzene	ND	0.14	mg/Kg	5	2/9/2023 12:37:00 PM	BS94497
Xylenes, Total	0.47	0.29	mg/Kg	5	2/9/2023 12:37:00 PM	BS94497
Surr: 4-Bromofluorobenzene	113	70-130	%Rec	5	2/9/2023 12:37:00 PM	BS94497

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 4 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: FS-29B
<b>Project:</b>	Chaco 147H	Collection Date: 2/8/2023 12:27:00 PM
Lab ID:	2302429-005	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 11:57:24 AM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: mb
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/9/2023 12:36:00 PM	73100
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/9/2023 12:36:00 PM	73100
Surr: DNOP	113	69-147	%Rec	1	2/9/2023 12:36:00 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: CCM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	2/9/2023 12:17:00 PM	GS94497
Surr: BFB	96.8	37.7-212	%Rec	1	2/9/2023 12:17:00 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: CCM
Benzene	ND	0.016	mg/Kg	1	2/9/2023 12:17:00 PM	BS94497
Toluene	ND	0.031	mg/Kg	1	2/9/2023 12:17:00 PM	BS94497
Ethylbenzene	ND	0.031	mg/Kg	1	2/9/2023 12:17:00 PM	BS94497
Xylenes, Total	ND	0.063	mg/Kg	1	2/9/2023 12:17:00 PM	BS94497
Surr: 4-Bromofluorobenzene	95.0	70-130	%Rec	1	2/9/2023 12:17:00 PM	BS94497

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 5 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: ENS	SOLUM		Client Sample ID: FS-30
Project: Cha	co 147H		Collection Date: 2/8/2023 1:03:00 PM
Lab ID: 2302	2429-006 M	atrix: MEOH (SOIL)	<b>Received Date:</b> 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 12:09:48 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analys	t: mb
Diesel Range Organics (DRO)	16	14	mg/Kg	1	2/9/2023 12:50:17 PM	73100
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/9/2023 12:50:17 PM	73100
Surr: DNOP	114	69-147	%Rec	1	2/9/2023 12:50:17 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	5.6	mg/Kg	1	2/9/2023 11:23:00 AM	GS94497
Surr: BFB	94.4	37.7-212	%Rec	1	2/9/2023 11:23:00 AM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.028	mg/Kg	1	2/9/2023 11:23:00 AM	BS94497
Toluene	ND	0.056	mg/Kg	1	2/9/2023 11:23:00 AM	BS94497
Ethylbenzene	ND	0.056	mg/Kg	1	2/9/2023 11:23:00 AM	BS94497
Xylenes, Total	ND	0.11	mg/Kg	1	2/9/2023 11:23:00 AM	BS94497
Surr: 4-Bromofluorobenzene	81.6	70-130	%Rec	1	2/9/2023 11:23:00 AM	BS94497

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

* Value exceeds Maximum Contaminant Level. **Qualifiers:** 

- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 6 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: FS-16B
Project: Chaco 147H	Collection Date: 2/8/2023 1:33:00 PM
Lab ID: 2302429-007	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 12:22:13 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	RGANICS				Analys	t: mb
Diesel Range Organics (DRO)	40	15	mg/Kg	1	2/9/2023 1:03:37 PM	73100
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/9/2023 1:03:37 PM	73100
Surr: DNOP	125	69-147	%Rec	1	2/9/2023 1:03:37 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	8.1	mg/Kg	2	2/9/2023 11:46:23 AM	GS94497
Surr: BFB	107	37.7-212	%Rec	2	2/9/2023 11:46:23 AM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.040	mg/Kg	2	2/9/2023 11:46:23 AM	BS94497
Toluene	ND	0.081	mg/Kg	2	2/9/2023 11:46:23 AM	BS94497
Ethylbenzene	ND	0.081	mg/Kg	2	2/9/2023 11:46:23 AM	BS94497
Xylenes, Total	ND	0.16	mg/Kg	2	2/9/2023 11:46:23 AM	BS94497
Surr: 4-Bromofluorobenzene	84.2	70-130	%Rec	2	2/9/2023 11:46:23 AM	BS94497

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р RL Reporting Limit

Page 7 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: FS-17B
<b>Project:</b>	Chaco 147H	Collection Date: 2/8/2023 1:36:00 PM
Lab ID:	2302429-008	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 12:34:38 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	: mb
Diesel Range Organics (DRO)	14	14	mg/Kg	1	2/9/2023 1:17:14 PM	73100
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	2/9/2023 1:17:14 PM	73100
Surr: DNOP	120	69-147	%Rec	1	2/9/2023 1:17:14 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	: JJP
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	2/9/2023 12:09:52 PM	GS94497
Surr: BFB	98.3	37.7-212	%Rec	1	2/9/2023 12:09:52 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	: JJP
Benzene	ND	0.023	mg/Kg	1	2/9/2023 12:09:52 PM	BS94497
Toluene	ND	0.046	mg/Kg	1	2/9/2023 12:09:52 PM	BS94497
Ethylbenzene	ND	0.046	mg/Kg	1	2/9/2023 12:09:52 PM	BS94497
Xylenes, Total	ND	0.092	mg/Kg	1	2/9/2023 12:09:52 PM	BS94497
Surr: 4-Bromofluorobenzene	83.8	70-130	%Rec	1	2/9/2023 12:09:52 PM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: FS-18B
<b>Project:</b>	Chaco 147H	Collection Date: 2/8/2023 1:40:00 PM
Lab ID:	2302429-009	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 1:11:52 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	RGANICS				Analys	t: mb
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	2/9/2023 1:30:59 PM	73100
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/9/2023 1:30:59 PM	73100
Surr: DNOP	122	69-147	%Rec	1	2/9/2023 1:30:59 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	2/9/2023 12:33:22 PM	GS94497
Surr: BFB	97.1	37.7-212	%Rec	1	2/9/2023 12:33:22 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.019	mg/Kg	1	2/9/2023 12:33:22 PM	BS94497
Toluene	ND	0.038	mg/Kg	1	2/9/2023 12:33:22 PM	BS94497
Ethylbenzene	ND	0.038	mg/Kg	1	2/9/2023 12:33:22 PM	BS94497
Xylenes, Total	ND	0.075	mg/Kg	1	2/9/2023 12:33:22 PM	BS94497
Surr: 4-Bromofluorobenzene	86.4	70-130	%Rec	1	2/9/2023 12:33:22 PM	BS94497

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 9 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: EI	NSOLUM		Client Sample ID: SW-07
Project: Cl	haco 147H		Collection Date: 2/8/2023 1:55:00 PM
Lab ID: 23	802429-010	Matrix: MEOH (SOIL)	Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 1:24:16 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: mb
Diesel Range Organics (DRO)	ND	13	mg/Kg	1	2/9/2023 1:45:01 PM	73100
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	2/9/2023 1:45:01 PM	73100
Surr: DNOP	117	69-147	%Rec	1	2/9/2023 1:45:01 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	2/9/2023 12:56:49 PM	GS94497
Surr: BFB	96.8	37.7-212	%Rec	1	2/9/2023 12:56:49 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.020	mg/Kg	1	2/9/2023 12:56:49 PM	BS94497
Toluene	ND	0.041	mg/Kg	1	2/9/2023 12:56:49 PM	BS94497
Ethylbenzene	ND	0.041	mg/Kg	1	2/9/2023 12:56:49 PM	BS94497
Xylenes, Total	ND	0.082	mg/Kg	1	2/9/2023 12:56:49 PM	BS94497
Surr: 4-Bromofluorobenzene	84.1	70-130	%Rec	1	2/9/2023 12:56:49 PM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

Page 10 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT	ENSOLUM	Client Sample ID: SW-08
Project:	Chaco 147H	Collection Date: 2/8/2023 2:00:00 PM
Lab ID:	2302429-011	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: JMT
Chloride	ND	60	mg/Kg	20	2/9/2023 1:36:41 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: mb
Diesel Range Organics (DRO)	17	15	mg/Kg	1	2/9/2023 1:58:42 PM	73100
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/9/2023 1:58:42 PM	73100
Surr: DNOP	114	69-147	%Rec	1	2/9/2023 1:58:42 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	2/9/2023 1:20:16 PM	GS94497
Surr: BFB	99.0	37.7-212	%Rec	1	2/9/2023 1:20:16 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.021	mg/Kg	1	2/9/2023 1:20:16 PM	BS94497
Toluene	ND	0.043	mg/Kg	1	2/9/2023 1:20:16 PM	BS94497
Ethylbenzene	ND	0.043	mg/Kg	1	2/9/2023 1:20:16 PM	BS94497
Xylenes, Total	ND	0.086	mg/Kg	1	2/9/2023 1:20:16 PM	BS94497
Surr: 4-Bromofluorobenzene	85.6	70-130	%Rec	1	2/9/2023 1:20:16 PM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- JAnalyte detected below quantitation limitsPSample pH Not In Range
- P Sample pH Not In RL Reporting Limit
- RL Re

Page 11 of 16

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302429

Date Reported: 2/13/2023

CLIENT: ENSOLUM	Client Sample ID: SW-09
Project: Chaco 147H	Collection Date: 2/8/2023 2:15:00 PM
Lab ID: 2302429-012	Matrix: MEOH (SOIL) Received Date: 2/9/2023 7:15:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>JMT</b>
Chloride	ND	60	mg/Kg	20	2/9/2023 1:49:05 PM	73097
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analys	t: mb
Diesel Range Organics (DRO)	29	14	mg/Kg	1	2/9/2023 2:12:36 PM	73100
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/9/2023 2:12:36 PM	73100
Surr: DNOP	108	69-147	%Rec	1	2/9/2023 2:12:36 PM	73100
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: JJP
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	2/9/2023 1:43:50 PM	GS94497
Surr: BFB	98.6	37.7-212	%Rec	1	2/9/2023 1:43:50 PM	GS94497
EPA METHOD 8021B: VOLATILES					Analys	t: JJP
Benzene	ND	0.019	mg/Kg	1	2/9/2023 1:43:50 PM	BS94497
Toluene	ND	0.037	mg/Kg	1	2/9/2023 1:43:50 PM	BS94497
Ethylbenzene	ND	0.037	mg/Kg	1	2/9/2023 1:43:50 PM	BS94497
Xylenes, Total	ND	0.074	mg/Kg	1	2/9/2023 1:43:50 PM	BS94497
Surr: 4-Bromofluorobenzene	82.5	70-130	%Rec	1	2/9/2023 1:43:50 PM	BS94497

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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated ValueJ Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 16

Client: Project:	ENSO Chaco	-									
Sample ID:	MB-73097	SampTyp	e: Me	BLK	Tes	tCode: EF	A Method	300.0: Anions	;		
Client ID:	PBS	Batch II	D: <b>730</b>	)97	F	RunNo: <b>94</b>	508				
Prep Date:	2/9/2023	Analysis Date	e: <b>2/</b> 9	9/2023	S	SeqNo: 34	15573	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-73097	SampTyp	e: <b>LC</b>	s	Tes	tCode: EP	A Method	300.0: Anions	5		
Client ID:	LCSS	Batch II	D: <b>730</b>	)97	F	RunNo: <b>94</b>	508				
Prep Date:	2/9/2023	Analysis Date	e: <b>2/</b> 9	9/2023	S	SeqNo: <b>34</b>	15574	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	1.5	15.00	0	98.0	90	110			

- * 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 13 of 16

2302429

13-Feb-23

WO#:

2302429

WO#:

Hall Environm	ental Analy	ysis L	aborato	ry, Inc.						13-Feb-2
	ISOLUM aco 147H									
Sample ID: MB-73100	Samp	Туре: МЕ	BLK	Tes	tCode: EP	A Method	8015M/D: Die	esel Range	Organics	
Client ID: PBS	Batc	h ID: 73	100	F	RunNo: <b>94</b>	509				
Prep Date: 2/9/2023	Analysis [	Date: <b>2/</b>	9/2023	S	SeqNo: 34	15382	Units: mg/K	íg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO	) ND	15					-			
Notor Oil Range Organics (M	RO) ND	50								
Surr: DNOP	9.9		10.00		99.1	69	147			
Sample ID: LCS-73100	Samp	Type: LC	S	Tes	tCode: EF	A Method	8015M/D: Die	esel Range	Organics	
Client ID: LCSS	Batc	h ID: 73	100	F	RunNo: <b>94</b>	509				
Prep Date: 2/9/2023	Analysis [	Date: 2/	9/2023	S	SeqNo: 34	15383	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO	57	15	50.00	0	115	61.9	130			
Surr: DNOP	5.1		5.000		103	69	147			
Sample ID: 2302429-01	2AMS Samp	Туре: М	6	Tes	tCode: EF	A Method	8015M/D: Die	esel Range	Organics	
Client ID: SW-09	Batc	h ID: <b>73</b> ′	100	F	RunNo: <b>94</b>	509				
Prep Date: 2/9/2023	Analysis [	Date: 2/	9/2023	5	SeqNo: 34	15396	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO	67	15	49.80	29.01	76.1	54.2	135			
Surr: DNOP	6.4		4.980		129	69	147			
Sample ID: 2302429-01	2AMSD Samp	Туре: М	SD	Tes	tCode: EP	A Method	8015M/D: Die	esel Range	Organics	
Client ID: SW-09	Batc	h ID: 73	100	F	RunNo: <b>94</b>	509				
	Analysis [	Date <b>2</b>	9/2023	ç	SeqNo: 34	15307	Units: mg/K	a		
Prep Date: 2/9/2023	Analysis L		0/2020		•	15557		-9		

### 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

Diesel Range Organics (DRO)

Surr: DNOP

S % Recovery outside of standard limits. If undiluted results may be estimated.

69

6.0

15

48.59

4.859

29.01

B Analyte detected in the associated Method Blank

83.0

123

54.2

69

135

147

3.59

0

29.2

0

- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 14 of 16

**ENSOLUM** 

**Client:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Project: Chaco 14	7H									
Sample ID: 2.5ug gro lcs	SampTy	pe: LC	S	Tes	tCode: El	PA Method	8015D: Gasol	ine Range	•	
Client ID: LCSS	Batch I	ID: GS	94497	F	RunNo: 9	4497				
Prep Date:	Analysis Da	ite: 2/9	0/2023	S	SeqNo: 3	414883	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	113	72.3	137			
Surr: BFB	1100		1000		106	37.7	212			
Sample ID: <b>mb</b>	SampTy	ре: МВ	LK	Tes	tCode: El	PA Method	8015D: Gasol	ine Range	•	
Client ID: PBS	Batch I	ID: GS	94497	F	RunNo: 9	4497				
Prep Date:	Analysis Da	ite: <b>2/9</b>	9/2023	S	SeqNo: 3	414948	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.3	37.7	212			
Sample ID: 2302429-001ams	SampTy	pe: <b>MS</b>		Tes	tCode: El	PA Method	8015D: Gasol	ine Range	)	
Client ID: FS-24B	Batch I	ID: GS	94497	F	RunNo: 9	4498				
Prep Date:	Analysis Da	ite: 2/9	0/2023	S	SeqNo: 3	416379	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	3.9	19.56	0	115	70	130			
Surr: BFB	860		782.5		110	37.7	212			
Sample ID: 2302429-001amsd	SampTy	pe: <b>MS</b>	D	Tes	tCode: El	PA Method	8015D: Gasol	ine Range	•	
Client ID: FS-24B	Batch I	ID: GS	94497	F	RunNo: 9	4498				
Prep Date:	Analysis Da	ite: 2/9	9/2023	g	SeaNo: 3	416380	Units: ma/K	a		

Prep Date:	Analysis D	Date: 2/9	9/2023	S	SeqNo: 34	416380	Units: mg/K	/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	21	3.9	19.56	0	107	70	130	7.48	20		
Surr: BFB	830		782.5		107	37.7	212	0	0		

## Qualifiers:

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

#### WO#: 2302429 13-Feb-23

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	2302429

Client: Project:	ENSOLUN Chaco 147										
Sample ID: 10	00ng btex lcs	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volati	iles		
	CSS	Batch	n ID: <b>BS</b>	94497	F	RunNo: 94	4497				
Prep Date:		Analysis D				SeqNo: 34	-	Units: <b>mg/K</b>	a		
						•		_	-		- ·
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene Toluene		0.85	0.025 0.050	1.000 1.000	0	84.5 86.8	80	120 120			
Ethylbenzene		0.87 0.87	0.050	1.000	0 0	87.4	80 80	120			
Xylenes, Total		2.6	0.050	3.000	0	87.3	80 80	120			
Surr: 4-Bromoflu	iorobenzene	0.85	0.10	1.000	0	87.3 85.4	70	120			
		0.00		1.000		00.4	10	150			
Sample ID: ml	b	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: PE	BS	Batch	n ID: <b>BS</b>	94497	F	RunNo: <b>9</b> 4	4497				
Prep Date:		Analysis D	Date: 2/	9/2023	S	SeqNo: 34	414949	Units: <b>mg/K</b>	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: 4-Bromoflu	uorobenzene	0.84		1.000		84.3	70	130			
Sample ID: 23	02429-002ams	SampT	ype: MS	6	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: FS	S-25B	Batch	n ID: <b>BS</b>	94497	F	RunNo: <b>9</b> 4	4498				
Prep Date:		Analysis D	Date: 2/	9/2023	S	SeqNo: 34	416502	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.88	0.022	0.8993	0	97.6	68.8	120			
Toluene		0.89	0.045	0.8993	0	99.1	73.6	124			
Ethylbenzene		0.87	0.045	0.8993	0	97.1	72.7	129			
Xylenes, Total		2.6	0.090	2.698	0.02185	96.8	75.7	126			
Surr: 4-Bromoflu	uorobenzene	0.82		0.8993		91.3	70	130			
Sample ID: 23	02429-002amsd	SampT	ype: MS	SD	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: FS	6-25B	Batch	n ID: <b>BS</b>	94497	F	RunNo: <b>9</b> 4	4498				
				0/2022	5	SeqNo: 34	416503	Units: <b>mg/K</b>	(g		
Prep Date:		Analysis D		5/2025							
Prep Date: Analyte		Result	PQL	SPK value		%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
		-				%REC 91.3	LowLimit 68.8	HighLimit 120	%RPD 6.75	RPDLimit 20	Qual
Analyte		Result	PQL	SPK value	SPK Ref Val			-			Qual
Analyte Benzene		Result 0.82	PQL 0.022	SPK value 0.8993	SPK Ref Val 0	91.3	68.8	120	6.75	20	Qual
Analyte Benzene Toluene		Result 0.82 0.83	PQL 0.022 0.045	SPK value 0.8993 0.8993	SPK Ref Val 0 0	91.3 92.6	68.8 73.6	120 124	6.75 6.83	20 20	Qual

### 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 16 of 16

	HALL
	ENVIRONMENTAL
100	ANALYSIS
N. Contraction	LABORATORY

Page 98 of 118

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:	ENSOLUM	l	Work	Corder Numl	per: 2302429		RcptNo:	1
Received By:	Juan Roja	as	2/9/202	23 7:15:00 A	м	(finnes g	2	
Completed By:	Tracy Cas	sarrubias	2/9/202	23 7:32:56 A	м			
Reviewed By: $\ell$	ft 2-1	9-23						
Chain of Cust	tody							
1. Is Chain of Cu	istody comp	lete?			Yes 🗹	No 🗌	Not Present	
2. How was the s	sample deliv	vered?			Courier			
Log In					_			
3. Was an attem	pt made to o	cool the samp	les?		Yes 🗹	No 🗌	NA 🗌	
4. Were all samp	les received	l at a tempera	ature of >0° C	to 6.0°C	Yes 🗹	No 🗌		
5. Sample(s) in p	roper conta	iner(s)?			Yes 🗹	No 🗌		
6. Sufficient samp	ole volume f	or indicated t	est(s)?		Yes 🗹	No 🗌		
7. Are samples (e	except VOA	and ONG) pr	operly preserv	ed?	Yes 🔽	No 🗌		
8. Was preservat	ive added to	bottles?			Yes 🗌	No 🗹	NA 🗌	
9. Received at lea	ast 1 vial wit	h headspace	<1/4" for AQ \	/OA?	Yes 🗌	No 🗌	NA 🔽	
10. Were any sam	ple containe	ers received b	oroken?		Yes 🗌	No 🗹	# of preserved	
11.Does paperwoi					Yes 🗹	No 🗆	bottles checked for pH:	/
(Note discrepa						🗖	(<2 or Adjusted?	>12 unless noted)
2. Are matrices co			•		Yes 🗹	No 🗌	Aujusteu	
3. Is it clear what			<b>!</b> ?		Yes 🗹		Checked by:	n slala
4. Were all holdin (If no, notify cu					Yes 🗹	No 🗌	checked by.	N21-42
pecial Handli	ng (if app	olicable)						
15. Was client not	ified of all d	iscrepancies	with this order	?	Yes 🗌	No 🗌	NA 🗹	
Person N	Notified:	[		Date:	[			
By Whor	n:	[		Via:	eMail	Phone 📋 Fax	In Person	
Regardir	ng:	[				a de talle in second date tallers to second a second date rea		
Client In	structions:							
16. Additional rem	narks:							
17. <u>Cooler Inform</u>	nation							
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By		
1	0.3	Good	Yes	Morty				
2	1.6	Good	Yes	Morty				

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sceived by OCD: 4/3/2023 2:31:16 PM	2023 2:31:16 PM										d	Page 99 of	9 of
Chain-of	Chain-of-Custody Record	Turn-Around Time:	(2/6/23)		1	HALL ENVIDONMENTAL	Ĩ	VTE	G			< H	
Client: Ensolum	m, 226	Standard X Rust	& Rush Same day			ANALYSTS LABORATORY	N.	J.		a c			_ ≻
4th, Brooke Herb	( )t( )				Š	www.hallenvironmental.com	enviro	nmen	tal.co	E		)	
Mailing Address: ユチ ビ ビ 2 ッ	76 5 224 446	Chaco	ーンナチ	4901	4901 Hawkins NE	ч Ш Z	Albug	nerqu	e. NN	Albuquerque, NM 87109	6		
Dur (2720	(0 8/30)	Project #:		Tel. 5	505-345-3975	3975	Га Га	Fax 505-345-4107	345-4	1107			
Phone #: 9 子ク	970-4103 - 6824		in the second second			Ā	Analysis	s Req	Request				
smail or Fax#: $b \mu$	email or Fax#: bhub & ensel um lon	Project Manager: 75 Cop Ke Her h	Ke Herb				70		(tr	-	-		
QA/QC Package:		6400	bhob Censolan, con	802 802		0.111	<del>s '*</del> c		iəsqv				
Standard	Level 4 (Full Validation)	101 NO 1		0			वे		4\tr				
	□ Az Compliance	Sampler: Reece F	Hanson		(1.4	9728	^{'z} Oħ						
	Other	On Ice: D-Yes	D No	05	Þ0⊆		1-4	(40	3.5				
🗆 EDD (Type)		# of Coolers: 2	Warty	19)	; po			_	1.1				
		Cooler Temp(Including CF): (	3.4-0.1=6.3(°C)	I 2D	oqtə		_						
		Containar Drocomotivo	1.7-0.1=1.6	08:	M) 8	8 AS	A) (A	s) (			-		
Date Time Matrix	rix Sample Name	#	2.304.24.2G	нат	EDE								
:05 81-11 (218)2	1 5-243		100	$\times$							_		T
1153	F5-25B		002								1		
0771	SIT2-2713		003										
6221	F5- 2813		hou										İ
F141	FS-2913		nor										1
20 21	F5-30		0000										
5551	F5-165		t.00										Î
1221	51t) - 52		008										
07-61	12-1813		sch B										
1355	50-07		010										
00/1	5w - 08		611										

If necessary, samples submitted to Half 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. SILE ESPERANNIA AND.

LC: rhanson @ensilum. com

Remarks: Ş

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February 16, 2023

Brooke Herb ENSOLUM 606 S. Rio Grande Suite A Aztec, NM 87410 TEL: (903) 821-5603 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Chaco 147H

OrderNo.: 2302531

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 5 sample(s) on 2/11/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302531

Date Reported: 2/16/2023

CLIENT:	ENSOLUM	Client Sample ID: FS-21E
Project:	Chaco 147H	Collection Date: 2/10/2023 10:45:00 AM
Lab ID:	2302531-001	Matrix: MEOH (SOIL) Received Date: 2/11/2023 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/13/2023 11:08:07 AM	73155
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/13/2023 11:46:28 AM	73149
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	2/13/2023 11:46:28 AM	73149
Surr: DNOP	93.7	69-147	%Rec	1	2/13/2023 11:46:28 AM	73149
EPA METHOD 8015D: GASOLINE RANGE					Analyst	JJP
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	2/13/2023 11:25:38 AM	GS9456(
Surr: BFB	106	37.7-212	%Rec	1	2/13/2023 11:25:38 AM	GS9456(
EPA METHOD 8021B: VOLATILES					Analyst	JJP
Benzene	ND	0.017	mg/Kg	1	2/13/2023 11:25:38 AM	R94566
Toluene	ND	0.035	mg/Kg	1	2/13/2023 11:25:38 AM	R94566
Ethylbenzene	ND	0.035	mg/Kg	1	2/13/2023 11:25:38 AM	R94566
Xylenes, Total	ND	0.069	mg/Kg	1	2/13/2023 11:25:38 AM	R94566
Surr: 4-Bromofluorobenzene	84.4	70-130	%Rec	1	2/13/2023 11:25:38 AM	R94566

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- Reporting Limit

RL

Page 1 of 9

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302531

Date Reported: 2/16/2023

CLIENT: E	NSOLUM	(	Client Sample ID: FS-21W
Project: C	Shaco 147H		Collection Date: 2/10/2023 10:50:00 AM
Lab ID: 2	302531-002	Matrix: MEOH (SOIL)	Received Date: 2/11/2023 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/13/2023 11:20:32 AM	73155
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	2/13/2023 12:18:02 PM	73149
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/13/2023 12:18:02 PM	73149
Surr: DNOP	97.4	69-147	%Rec	1	2/13/2023 12:18:02 PM	73149
EPA METHOD 8015D: GASOLINE RANGE					Analyst	JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	2/13/2023 11:49:44 AM	GS9456(
Surr: BFB	107	37.7-212	%Rec	1	2/13/2023 11:49:44 AM	GS9456(
EPA METHOD 8021B: VOLATILES					Analyst	JJP
Benzene	ND	0.024	mg/Kg	1	2/13/2023 11:49:44 AM	R94566
Toluene	ND	0.049	mg/Kg	1	2/13/2023 11:49:44 AM	R94566
Ethylbenzene	ND	0.049	mg/Kg	1	2/13/2023 11:49:44 AM	R94566
Xylenes, Total	ND	0.097	mg/Kg	1	2/13/2023 11:49:44 AM	R94566
Surr: 4-Bromofluorobenzene	85.8	70-130	%Rec	1	2/13/2023 11:49:44 AM	R94566

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р Reporting Limit

RL

Page 2 of 9

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302531

Date Reported: 2/16/2023

CLIENT:	ENSOLUM	(	Client Sample ID: FS-28E
Project:	Chaco 147H		Collection Date: 2/10/2023 12:23:00 PM
Lab ID:	2302531-003	Matrix: MEOH (SOIL)	Received Date: 2/11/2023 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/13/2023 11:32:57 AM	73155
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	2/13/2023 12:28:36 PM	73149
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	2/13/2023 12:28:36 PM	73149
Surr: DNOP	87.3	69-147	%Rec	1	2/13/2023 12:28:36 PM	73149
EPA METHOD 8015D: GASOLINE RANGE					Analyst	JJP
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	2/13/2023 12:13:51 PM	GS9456(
Surr: BFB	109	37.7-212	%Rec	1	2/13/2023 12:13:51 PM	GS9456(
EPA METHOD 8021B: VOLATILES					Analyst	JJP
Benzene	ND	0.017	mg/Kg	1	2/13/2023 12:13:51 PM	R94566
Toluene	ND	0.035	mg/Kg	1	2/13/2023 12:13:51 PM	R94566
Ethylbenzene	ND	0.035	mg/Kg	1	2/13/2023 12:13:51 PM	R94566
Xylenes, Total	ND	0.070	mg/Kg	1	2/13/2023 12:13:51 PM	R94566
Surr: 4-Bromofluorobenzene	87.6	70-130	%Rec	1	2/13/2023 12:13:51 PM	R94566

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

Page 3 of 9

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302531

Date Reported: 2/16/2023

CLIENT: ENSOLUM	Client Sample ID: FS-28W
Project: Chaco 147H	Collection Date: 2/10/2023 12:25:00 PM
Lab ID: 2302531-004	Matrix: MEOH (SOIL) Received Date: 2/11/2023 8:45:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/13/2023 11:45:21 AM	73155
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	2/13/2023 12:39:32 PM	73149
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	2/13/2023 12:39:32 PM	73149
Surr: DNOP	89.5	69-147	%Rec	1	2/13/2023 12:39:32 PM	73149
EPA METHOD 8015D: GASOLINE RANGE					Analyst	JJP
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	2/13/2023 12:38:05 PM	GS9456(
Surr: BFB	111	37.7-212	%Rec	1	2/13/2023 12:38:05 PM	GS9456(
EPA METHOD 8021B: VOLATILES					Analyst	JJP
Benzene	ND	0.017	mg/Kg	1	2/13/2023 12:38:05 PM	R94566
Toluene	ND	0.034	mg/Kg	1	2/13/2023 12:38:05 PM	R94566
Ethylbenzene	ND	0.034	mg/Kg	1	2/13/2023 12:38:05 PM	R94566
Xylenes, Total	ND	0.069	mg/Kg	1	2/13/2023 12:38:05 PM	R94566
Surr: 4-Bromofluorobenzene	89.1	70-130	%Rec	1	2/13/2023 12:38:05 PM	R94566

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 9

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2302531

Date Reported: 2/16/2023

CLIENT: ENSOLUM	Client Sample ID: SW-10
Project: Chaco 147H	Collection Date: 2/10/2023 12:28:00 PM
Lab ID: 2302531-005	Matrix: MEOH (SOIL) Received Date: 2/11/2023 8:45:00 AM

Analyses	Result	RL (	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CAS
Chloride	ND	60	mg/Kg	20	2/13/2023 11:57:45 AM	73155
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst	mb
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	2/13/2023 12:50:08 PM	73149
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	2/13/2023 12:50:08 PM	73149
Surr: DNOP	92.5	69-147	%Rec	1	2/13/2023 12:50:08 PM	73149
EPA METHOD 8015D: GASOLINE RANGE					Analyst	JJP
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	2/13/2023 1:02:20 PM	GS9456(
Surr: BFB	110	37.7-212	%Rec	1	2/13/2023 1:02:20 PM	GS9456(
EPA METHOD 8021B: VOLATILES					Analyst	JJP
Benzene	ND	0.017	mg/Kg	1	2/13/2023 1:02:20 PM	R94566
Toluene	ND	0.034	mg/Kg	1	2/13/2023 1:02:20 PM	R94566
Ethylbenzene	ND	0.034	mg/Kg	1	2/13/2023 1:02:20 PM	R94566
Xylenes, Total	ND	0.069	mg/Kg	1	2/13/2023 1:02:20 PM	R94566
Surr: 4-Bromofluorobenzene	86.8	70-130	%Rec	1	2/13/2023 1:02:20 PM	R94566

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- В Analyte detected in the associated Method Blank
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits Sample pH Not In Range
- Р Reporting Limit

RL

Page 5 of 9

Client: ENS	SOLUM			
Project: Cha	co 147H			
Sample ID: MB-73155	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 73155	RunNo: 94562		
Prep Date: 2/13/2023	Analysis Date: 2/13/2023	SeqNo: 3419077	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID: LCS-73155	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Client ID: LCSS	Batch ID: 73155	RunNo: 94562		
Prep Date: 2/13/2023	Analysis Date: 2/13/2023	SeqNo: 3419078	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	14 1.5 15.00	0 95.6 90	110	

- * 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 9

Page 106 of 118

2302531

16-Feb-23

WO#:

QC SUMMART REFORT	WO#:	2302531
Hall Environmental Analysis Laboratory, Inc.		16-Feb-23

Client:	ENSOLU	M									
Project:	Chaco 14	7H									
Sample ID:	2302531-001AMS	SampT	ype: <b>M</b> \$	6	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	FS-21E	Batch	ID: 73	149	F	RunNo: <b>9</b> 4	4563				
Prep Date:	2/13/2023	Analysis D	ate: <b>2/</b>	13/2023	S	SeqNo: 34	418327	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Drganics (DRO)	45	9.4	47.04	0	96.1	54.2	135			
Surr: DNOP		4.3		4.704		90.9	69	147			
Sample ID: 2302531-001AMSD         SampType: MSD         TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID:	FS-21E	Batch	ID: 73	149	F	RunNo: <b>9</b> 4	4563				
Prep Date:	2/13/2023	Analysis D	ate: <b>2/</b>	13/2023	5	SeqNo: 34	418328	Units: <b>mg/#</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Drganics (DRO)	44	9.9	49.70	0	87.5	54.2	135	3.82	29.2	
Surr: DNOP		5.1		4.970		103	69	147	0	0	
Sample ID:	LCS-73149	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 73	149	F	RunNo: <b>9</b> 4	4563				
Prep Date:	2/13/2023	Analysis D	ate: 2/	13/2023	5	SeqNo: 34	418333	Units: mg/k	íg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	42	10	50.00	0	83.9	61.9	130			
Surr: DNOP		4.0		5.000		79.6	69	147			
Sample ID:	MB-73149	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch	ID: 73	149	F	RunNo: <b>9</b> 4	4563				
Prep Date:	2/13/2023	Analysis D	ate: <b>2/</b>	13/2023	5	SeqNo: 34	418334	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	ND	10								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		8.5		10.00		84.6	69	147			

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

Released to Imaging: 4/11/2023 9:02:21 AM

ZC SUMMART REFORT	WO#:	2302531
Hall Environmental Analysis Laboratory, Inc.		16-Feb-23

Client:	ENSOLUM									
Project:	Chaco 147H									
Sample ID: 2.5ug	grolcs S	ampType:	LCS	Tes	Code: EP	A Method	8015D: Gaso	line Rang	9	
Client ID: LCSS	;	Batch ID:	GS94566	F	unNo: <b>94</b>	566				
Prep Date:	Anal	/sis Date:	2/13/2023	S	eqNo: 34	18356	Units: mg/K	g		
Analyte	Res	sult PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	iics (GRO)	30 5	.0 25.00	0	118	72.3	137			
Surr: BFB	12	200	1000		117	37.7	212			
Sample ID: mb	S	ampType:	MBLK	Tes	Code: EP	A Method	8015D: Gaso	line Rang	9	
Client ID: PBS		Batch ID:	GS94566	F	unNo: <b>94</b>	566				
Prep Date:	Anal	/sis Date:	2/13/2023	S	SeqNo: 3418357			Units: mg/Kg		
Analyte	Res	sult PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	iics (GRO)	ND 5	.0							
Surr: BFB	11	00	1000		105	37.7	212			
Sample ID: 23025		ampType:	MS	Tes	Code: EP	A Method	8015D: Gaso	line Rang	9	
Sample ID: 23025 Client ID: FS-21	<b>531-001ams</b> S	ampType: Batch ID:			Code: EP		8015D: Gaso	line Rang	9	
•	531-001ams S E		GS94566	F		566	8015D: Gaso Units: mg/K	U	9	
Client ID: FS-21	531-001ams S E	Batch ID: /sis Date:	GS94566 2/13/2023	F	unNo: <b>94</b>	566		U	e RPDLimit	Qual
Client ID: FS-21 Prep Date:	5 <b>31-001ams</b> S E Anal Res	Batch ID: vsis Date: sult PQ	GS94566 2/13/2023	א פ	unNo: <b>94</b> eqNo: <b>34</b>	566 18359	Units: <b>mg/K</b>	g		Qual
Client ID: <b>FS-21</b> Prep Date: Analyte	531-001ams S E Anal Res tics (GRO)	Batch ID: vsis Date: sult PQ	GS94566 2/13/2023 L SPK value	F S SPK Ref Val	unNo: <b>94</b> eqNo: <b>34</b> %REC	9566 18359 LowLimit	Units: <b>mg/K</b> HighLimit	g		Qual
Client ID: <b>FS-21</b> Prep Date: Analyte Gasoline Range Organ	531-001ams S E Anal Res tics (GRO)	Batch ID: vsis Date: sult PQ 21 3	GS94566 2/13/2023 L SPK value 5 17.32 693.0	F S SPK Ref Val 0	unNo: <b>94</b> eqNo: <b>34</b> %REC 122 121	2566 18359 LowLimit 70 37.7	Units: <b>mg/K</b> HighLimit 130	g %RPD	RPDLimit	Qual
Client ID: <b>FS-21</b> Prep Date: Analyte Gasoline Range Organ Surr: BFB	531-001ams S E Anal Res itcs (GRO) 531-001amsd S	Batch ID: ysis Date: sult PQ 21 3 440	GS94566 2/13/2023 L SPK value 5 17.32 693.0 MSD	F S SPK Ref Val 0 Tes	unNo: <b>94</b> eqNo: <b>34</b> %REC 122 121	2566 118359 LowLimit 70 37.7 24 Method	Units: <b>mg/K</b> HighLimit 130 212	g %RPD	RPDLimit	Qual
Client ID: FS-21 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 23025	531-001ams S E Anal: Res nics (GRO) 8 531-001amsd S E	Batch ID: ysis Date: sult PQ 21 3 440 ampType:	GS94566 2/13/2023 L SPK value .5 17.32 693.0 MSD GS94566	F SPK Ref Val 0 Tes F	eqNo: 94 %REC 122 121 Code: EP	2566 118359 LowLimit 70 37.7 PA Method 2566	Units: <b>mg/K</b> HighLimit 130 212	g %RPD line Rang	RPDLimit	Qual
Client ID: FS-21 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 23025 Client ID: FS-21	531-001ams S E Anal: Res nics (GRO) 8 531-001amsd S E	Batch ID: ysis Date: 21 3 440 ampType: Batch ID: ysis Date:	GS94566 2/13/2023 L SPK value .5 17.32 693.0 MSD GS94566 2/13/2023	F SPK Ref Val 0 Tes F	tunNo: 94 6eqNo: 34 %REC 122 121 Code: EP	2566 118359 LowLimit 70 37.7 PA Method 2566	Units: mg/K HighLimit 130 212 8015D: Gaso	g %RPD line Rang	RPDLimit	Qual
Client ID: FS-21 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 23025 Client ID: FS-21 Prep Date:	531-001ams S E Anal Res itics (GRO) 531-001amsd S E Anal Res	Batch ID: ysis Date: 21 3 440 ampType: Batch ID: ysis Date: sult PQ	GS94566 2/13/2023 L SPK value .5 17.32 693.0 MSD GS94566 2/13/2023	F SPK Ref Val 0 Tes F S	aunNo: 94 aeqNo: 34 %REC 122 121 acCode: EP aunNo: 94 aeqNo: 34	2566 118359 LowLimit 70 37.7 24 Method 2566 218360	Units: mg/K HighLimit 130 212 8015D: Gaso Units: mg/K	g %RPD line Rang	RPDLimit	

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

**ENSOLUM** 

Chaco 147H

**Client:** 

**Project:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Sample ID: 100ng btex lcs	C		0	Tee						
		Туре: <b>LC</b>					8021B: Volat	lles		
Client ID: LCSS	Batc	h ID: <b>R9</b>	4566	R	unNo: 94	4566				
Prep Date:	Analysis I	Date: 2/	13/2023	S	eqNo: 34	418365	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.1	80	120			
Toluene	0.88	0.050	1.000	0	87.9	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.6	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		87.8	70	130			
Sample ID: mb	Samp	Туре: <b>МЕ</b>	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batc	h ID: <b>R9</b>	4566	R	unNo: <b>9</b> 4	4566				
Prep Date:	Analysis I	Date: 2/	13/2023	S	eqNo: 34	418366	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: 4-Bromofluorobenzene	0.86		1.000		85.6	70	130			
Sample ID: 2302531-002ams	Samp	Туре: <b>МS</b>	;	Tes	Code: EF	PA Method	8021B: Volat	iles		
Client ID: FS-21W	Batc	h ID: <b>R9</b>	4566	R	unNo: <b>9</b> 4	4566				
						40000	Units: mg/Kg			
Prep Date:	Analysis I	Date: 2/	13/2023	C C	eqNo: 34	19003	Units: mg/K	g		
Prep Date: Analyte	Analysis I Result	Date: <b>2/</b> PQL		SPK Ref Val	%REC	LowLimit	HighLimit	•9 %RPD	RPDLimit	Qual
	-						•	-	RPDLimit	Qual
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	-	RPDLimit	Qual
Analyte Benzene	Result 0.82	PQL 0.024	SPK value 0.9728	SPK Ref Val 0	%REC 84.1	LowLimit 68.8	HighLimit 120	-	RPDLimit	Qual
Analyte Benzene Toluene	Result 0.82 0.84	PQL 0.024 0.049	SPK value 0.9728 0.9728	SPK Ref Val 0 0.01683	%REC 84.1 84.7	LowLimit 68.8 73.6	HighLimit 120 124	-	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene	Result 0.82 0.84 0.85	PQL 0.024 0.049 0.049	SPK value 0.9728 0.9728 0.9728	SPK Ref Val 0 0.01683 0	%REC 84.1 84.7 87.3	LowLimit 68.8 73.6 72.7	HighLimit 120 124 129	-	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Result 0.82 0.84 0.85 2.6 0.87	PQL 0.024 0.049 0.049	SPK value 0.9728 0.9728 0.9728 2.918 0.9728	SPK Ref Val 0 0.01683 0 0.02860	%REC 84.1 84.7 87.3 86.8 89.3	LowLimit 68.8 73.6 72.7 75.7 70	HighLimit 120 124 129 126	%RPD	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	Result 0.82 0.84 0.85 2.6 0.87 I Samp	PQL 0.024 0.049 0.049 0.097	SPK value 0.9728 0.9728 2.918 0.9728	SPK Ref Val 0 0.01683 0 0.02860 Test	%REC 84.1 84.7 87.3 86.8 89.3	LowLimit 68.8 73.6 72.7 75.7 70 <b>PA Method</b>	HighLimit 120 124 129 126 130	%RPD	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd	Result 0.82 0.84 0.85 2.6 0.87 I Samp	PQL 0.024 0.049 0.049 0.097 Type: <b>MS</b>	SPK value 0.9728 0.9728 2.918 0.9728 0.9728 5D 4566	SPK Ref Val 0 0.01683 0 0.02860 Test R	%REC 84.1 84.7 87.3 86.8 89.3	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566	HighLimit 120 124 129 126 130	%RPD	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd Client ID: FS-21W	Result 0.82 0.84 0.85 2.6 0.87 I Samp Bato	PQL 0.024 0.049 0.049 0.097 Type: <b>MS</b>	SPK value 0.9728 0.9728 2.918 0.9728 6D 4566 13/2023	SPK Ref Val 0 0.01683 0 0.02860 Test R	%REC 84.1 84.7 87.3 86.8 89.3 Code: EF cunNo: 94 seqNo: 34	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566	HighLimit 120 124 129 126 130 8021B: Volat	%RPD	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd Client ID: FS-21W Prep Date:	Result 0.82 0.84 0.85 2.6 0.87 I Samp Bato Analysis I	PQL 0.024 0.049 0.097 Type: MS h ID: R9 Date: 2/	SPK value 0.9728 0.9728 2.918 0.9728 6D 4566 13/2023	SPK Ref Val 0 0.01683 0 0.02860 Tes R S	%REC 84.1 84.7 87.3 86.8 89.3 Code: EF cunNo: 94 seqNo: 34	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566 419004	HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K	%RPD		
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd Client ID: FS-21W Prep Date: Analyte Benzene	Result 0.82 0.84 0.85 2.6 0.87 I Samp Bato Analysis I Result	PQL 0.024 0.049 0.097 Type: MS th ID: R9 Date: 2/ PQL	SPK value 0.9728 0.9728 2.918 0.9728 5D 4566 13/2023 SPK value	SPK Ref Val 0 0.01683 0 0.02860 Test R SPK Ref Val	%REC 84.1 84.7 87.3 86.8 89.3 Code: EF cunNo: 94 SeqNo: 34 %REC	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566 419004 LowLimit	HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit	%RPD	RPDLimit	
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd Client ID: FS-21W Prep Date: Analyte Benzene	Result 0.82 0.84 0.85 2.6 0.87 I Samp Bato Analysis I Result 0.81	PQL 0.024 0.049 0.097 Type: MS th ID: R9 Date: 2/ PQL 0.024	SPK value 0.9728 0.9728 2.918 0.9728 0.9728 5D 4566 13/2023 SPK value 0.9728	SPK Ref Val 0 0.01683 0 0.02860 Test R S SPK Ref Val 0	%REC 84.1 84.7 87.3 86.8 89.3 COde: EF cunNo: 94 seqNo: 34 %REC 83.1	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566 419004 LowLimit 68.8	HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit 120	%RPD iiles ig %RPD 1.12	RPDLimit 20	
Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2302531-002amsd Client ID: FS-21W Prep Date: Analyte Benzene Toluene	Result 0.82 0.84 0.85 2.6 0.87 I Samp Bato Analysis I Result 0.81 0.83	PQL 0.024 0.049 0.097 Type: MS th ID: R9 Date: 2/ PQL 0.024 0.049	SPK value 0.9728 0.9728 2.918 0.9728 0.9728 5D 4566 13/2023 SPK value 0.9728 0.9728	SPK Ref Val 0 0.01683 0 0.02860 Test R S SPK Ref Val 0 0.01683	%REC 84.1 84.7 87.3 86.8 89.3 Code: EF JunNo: 94 SeqNo: 34 %REC 83.1 83.7	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 4566 419004 LowLimit 68.8 73.6	HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit 120 124	%RPD iiles 59 %RPD 1.12 1.15	RPDLimit 20 20	

### **Qualifiers:**

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

Page 9 of 9

#### WO#: 2302531 16-Feb-23

Client Name:       ENSOLUM       Work Order Number:       2302531       RcpINo:       1         Received By:       Tracy Casarrubias       2/11/2023       8:45:00 AM       Completed By:       Tracy Casarrubias       2/11/2023       8:55:53 AM         Reviewed By:       Tracy Casarrubias       2/11/2023       8:55:53 AM       No       Not Present       .         1       Is Chain of Custody complete?       Yes       No       No       Not Present       .         2. How was the sample delivered?       Courier       Courier       .       .       No       NA       .         3. Was an attempt made to cool the samples?       Yes       No       NA       .       .       .         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA       .       .         5. Sample(s) in proper container(s)?       Yes       No       NA       .       .       .         7. Are samples (except VOA and ONG) propenty preserved?       Yes       No       No       .       .       .         9. Received at least 1 visi with headspace        Yes       No       No       .       .       .       .       .       .       .       .       .       .       . </th <th>ANALY</th> <th>ONMENT SIS ATORY</th> <th>AL</th> <th>TE</th> <th>ll Environme L: 505-345-: Website: ww</th> <th>490 Albuquer 3975 FAX:</th> <th>01 Haw que, Ni 505-3</th> <th>kins NE M 87109 45-4107</th> <th>Sar</th> <th>nple Log-In Check List</th> <th></th>	ANALY	ONMENT SIS ATORY	AL	TE	ll Environme L: 505-345-: Website: ww	490 Albuquer 3975 FAX:	01 Haw que, Ni 505-3	kins NE M 87109 45-4107	Sar	nple Log-In Check List	
Completed By:       Tracy Casarrubias       2/11/2/203 8:55:53 AM         Reviewed By:       Clinity Clinity Complete?       Yes       No       Not Present         1. Is Chain of Custody complete?       Yes       No       Not Present         2. How was the sample delivered?       Counter         Loa In	Client Name:	ENSOLUM		Work	Order Num	ber: 230	2531			RcptNo: 1	
1. Is Chain of Custody complete?       Yes       No       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       Yes       No       NA         5. Sample(s) in proper container(s)?       Yes       No       NA         6. Sufficient sample volume for indicated tes(s)?       Yes       No       NA         7. Are samples (except VOA and ONG) properly preserved?       Yes       No       NA         9. Received at least 1 vial with headspace <1/td>       Yes       No       NA       # of preserved         10. Were any sample containers received broken?       Yes       No       If of preserved       bottles checked         11. Does paperwork match bottle labels?       Yes       No       If of preserved       for prt:       (c² or >12 unless notes)         12. Are matrices correcity identified on Chain of Custody?       Yes       No       If of preserved       Adjuided?         13. Is it clear what analyses were requested?       Yes       No       If were in homitoding times able to be met?       Yes       No       Na         14. Were all holding times able to be met?       Yes       No       Na       If unclear the t	Completed By:	Tracy Cas	arrubias	2/11/20							
3. Was an attempt made to cool the samples?       Yes       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA         5. Sample(s) in proper container(s)?       Yes       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes       No       NA         7. Are samples (except VOA and ONG) property preserved?       Yes       No       NA         8. Was preservative added to bottles?       Yes       No       NA         9. Received at least 1 vial with headspace <1/4" for AQ VOA?	1. Is Chain of Cu	stody comp						Να		Not Present	
5. Sample(s) in proper container(s)?       Yes       No         6. Sufficient sample volume for indicated test(s)?       Yes       No         7. Are samples (except VOA and ONG) properly preserved?       Yes       No         8. Was preservative added to bottles?       Yes       No         9. Received at least 1 vial with headspace <1/4" for AQ VOA?		ot made to c	cool the sampl	es?		Yes		No			
6. Sufficient sample volume for indicated test(s)?       Yes       No         7. Are samples (except VOA and ONG) properly preserved?       Yes       No         8. Was preservative added to bottles?       Yes       No       NA         9. Received at least 1 vial with headspace <1/4" for AQ VOA?	4. Were all sample	es received	at a temperat	ure of >0° C	to 6.0°C	Yes		No			
7. Are samples (except VOA and ONG) properly preserved?       Yes       No         8. Was preservative added to bottles?       Yes       No       NA         9. Received at least 1 vial with headspace <1/4" for AQ VOA?	5. Sample(s) in p	roper contai	iner(s)?			Yes		No			
8. Was preservative added to bottles?       Yes       No       NA         9. Received at least 1 vial with headspace <1/4" for AQ VOA?	6. Sufficient samp	le volume f	or indicated te	st(s)?		Yes		No			
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	7. Are samples (et	xcept VOA	and ONG) pro	perly preserve	ed?	Yes		No			
10. Were any sample containers received broken?       Yes       No       # of preserved bottle checked for pH:         11. Does paperwork match bottle labels?       Yes       No       # of preserved bottle checked for pH:         (Note discrepancies on chain of custody)       Yes       No       # of preserved bottle checked for pH:         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       Checked by: TINL 2/h1/2)         Special Handling (if applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA         15. Was client notified:       Date:	8. Was preservati	ve added to	bottles?			Yes		No		NA 🗍	/
10. Were any sample containers received broken?       Yes       No       # of preserved bottle checked for pH:         11. Does paperwork match bottle labels?       Yes       No       # of preserved bottles checked for pH:         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       Checked by: TIVL 2/h1/2)         Special Handling (if applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA         15. Was client notified of all discrepancies with this order?       Yes       No       NA       In Person         16. Additional remarks:       17. Cooler Information       Cooler No       Temp °C       Condition       Seal Intact       Seal No       Seal Date       Signed By	9. Received at lea	st 1 vial wit	h headsoace <	:1/4" for AO \	(OA?	Yes		No			
11. Does paperwork match bottle labels?       Yes       No       # of preserved bottles checked for pH:         (Note discrepancies on chain of custody)       Yes       No       Adjusted for pH:         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       Checked by: TIML 2/h/2)         Special Handling (if applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA         15. Was client notified:       Date:					0/11		_		_		
12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       Checked by: TIWL 2/µ/2)         14. Were all holding times able to be met?       Yes       No       Checked by: TIWL 2/µ/2)         Special Handling (if applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA         9 Person Notified:       Date:	11. Does paperwor	k match bot	tle labels?						_	bottles checked for pH:	d)
13. Is it clear what analyses were requested?       Yes ♥       No       Checked by: TWL 2/1/2)         14. Were all holding times able to be met? (If no, notify customer for authorization.)       Yes ♥       No       Checked by: TWL 2/1/2)         Special Handling (if applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA       ✓         15. Was client notified:       Date:       Date:        NA       ✓         Person Notified:       Date:       Client Instructions:        In Person         16. Additional remarks:       17. Cooler Information       Seal Intact       Seal No       Seal Date       Signed By	· ·					Yes		No			
(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:         Date:          By Whom:       Via:       eMail       Phone       Fax       In Person         Regarding:       Client Instructions:             16. Additional remarks:        17. Cooler Information       Seal No       Seal Date       Signed By									_		
15. Was client notified of all discrepancies with this order?       Yes       No       NA         Person Notified:       Date:	14. Were all holding	g times able	to be met?			Yes		No		Checked by: The 2/1/2	)
15. Was client notified of all discrepancies with this order?       Yes       No       NA         Person Notified:       Date:	Special Handlir	na (if ann	licable)								
By Whom:       Via:       eMail       Phone       Fax       In Person         Regarding:       Client Instructions:       In Person       In Person         16. Additional remarks:       In Person       In Person       In Person         17. Cooler Information       Cooler No       Temp °C       Condition       Seal Intact       Seal No       Seal Date       Signed By				ith this order?	>	Yes		No		NA 🔽	
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	By Whon Regardin	n: g:			*	,	ail [	] Phone [	] Fax	In Person	
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By	16. Additional rem	arks:									
1 0.6 Good Yes Morty	£		1			Seal D	ate	Signed	Ву	damma	
	1	0.6	Good	Yes	Morty						

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APPENDIX D

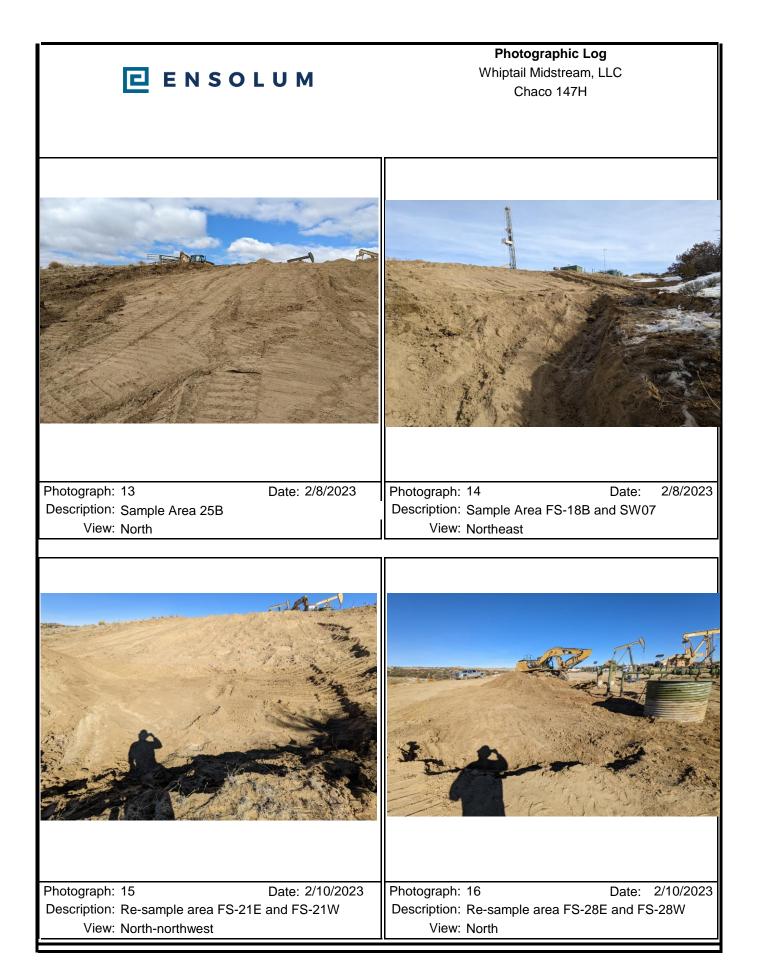
Photographic Log

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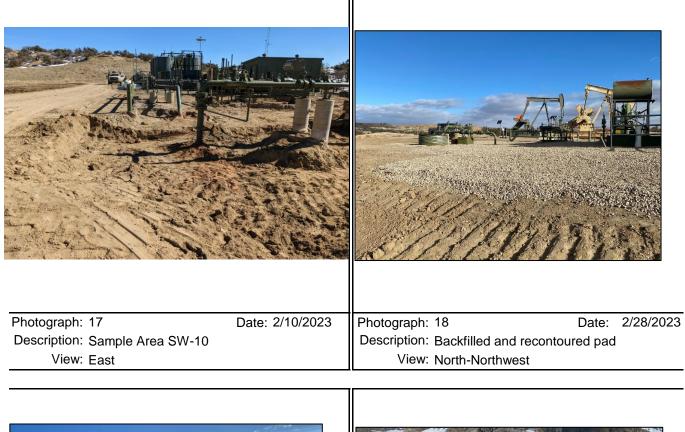


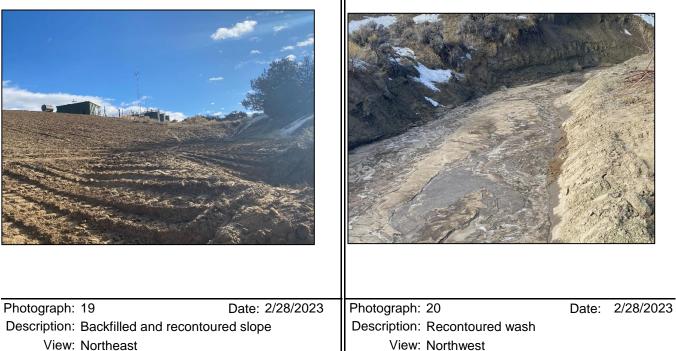






Photographic Log Whiptail Midstream, LLC Chaco 147H





District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

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

CONDITIONS

Operator:	OGRID:
Whiptail Midstream LLC	373240
15 West 6th Street	Action Number:
Tulsa, OK 74119	203488
	Action Type: [C-141] Release Corrective Action (C-141)

## CONDITIONS

Created By	Condition	Condition Date
nvelez	None	4/11/2023

CONDITIONS

Action 203488