

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

Incident ID	NRM2023331895
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Whiptail Midstream LLC	OGRID 373240
Contact Name: Ernest Johnson	Contact Telephone 918.289.2147
Contact email: ernie.johnson@whiptailmidstream.com	Incident # (assigned by OCD)
Contact mailing address 15 W. 6 <sup>th</sup> Street, Suite 2901, Tulsa, OK 74119	

### Location of Release Source

Latitude 36.2550621° Longitude -107.6777573°  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Chaco 2308 3L 405H (404H)	Site Type: Transfer Location
Date Release Discovered: 8/17/2020	API# N/A

Unit Letter	Section	Township	Range	County
L	3	23N	8W	San Juan

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

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 40 bbls	Volume Recovered (bbls) 35- 40 bbls
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 60 bbls	Volume Recovered (bbls) 35 - 40 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)



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## Cause of Release

Whiptail discovered a release of crude oil/produced water originating from a produced water pipe on August 17, 2020 near the Enduring Resources Chaco 2308 3L 405H well site, located in Section 4, T23N, R8W in San Juan County, NM. The volume of crude oil/ produced water mix was released is estimated at 100 bbls at this time, of which approximately 20-30 bbls were released outside of a lined containment. Whiptail recovered approximately 70 - 80 bbls of standing liquids via vac truck. The release went off-pad to the east approximately 360 feet down a first order tributary to Kimbeto Wash and another 410 feet down Kimbeto Wash and approximately 140 feet off-pad to the southwest. A third party contractor has been retained to oversee remediation of the release.

Was this a major release as defined by 19.15.29.7(A) NMAC?

☒ Yes ☐ No

If YES, for what reason(s) does the responsible party consider this a major release?

An unauthorized release greater than 25 bbls.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Originally reported to NMOCD and BLM by Enduring on 8/17/20.

Verbal notification was provided to the NMOCD (Cory Smith) by Whiptail (Ernie Johnson) and BLM (Emmanuel Abiodun Adeloye) by LT Environmental on Whiptail's behalf (Brooke Herb) on 8/18/20, within 24 hours of discovering the release.

## Initial Response

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

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

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

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



State of New Mexico  
Oil Conservation Division

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

Printed Name: Ernest Johnson Title: Director of Risk and Engineering Services

Signature: \_\_\_\_\_ Date: 8/18/20

email: ernie.johnson@whiptailmidstream.com Telephone: 918.289.2147

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_



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## Site Assessment/Characterization

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

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

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

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

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

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




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

Printed Name: Ernest Johnson Title: Director of Risk and Engineering Services

Signature:  Date: 11/13/2020

email: ernie.johnson@whiptailmidstream.com Telephone: 918.289.2147

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_



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## Remediation Plan


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

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

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

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

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Printed Name: Ernest Johnson Title: Director of Risk and Engineering Services  
Signature:  Date: 11/13/2020  
email: ernie.johnson@whiptailmidstream.com Telephone: 918.289.2147

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

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



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## Closure

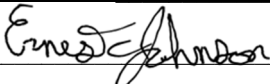
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled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

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

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

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

Printed Name: Ernest Johnson Title: Director of Risk and Engineering Services

Signature:  Date: 04/12/2021 p

email: ernie.johnson@whiptailmidstream.com Telephone: 918.289.2147

### OCD Only

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Closure Approved by:  Date: 03/28/2022

Printed Name: Nelson Velez Title: Environmental Specialist - Adv





March 26, 2021

Mr. Cory Smith  
Environmental Specialist  
New Mexico Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

**Subject: Site Remediation Report and Closure Request  
Chaco 2308 03L #404H and #405H  
Whiptail Midstream LLC and Enduring Resources IV, LLC  
NMOCD Incident Number: NRM2023331895  
San Juan County, New Mexico**

Dear Mr. Smith:

WSP USA, Inc (WSP), on behalf of Whiptail Midstream LLC (Whiptail) and Enduring Resources IV, LLC (Enduring), has prepared this Site Remediation Report detailing remediation activities of impacted soil from a release at the Chaco 2308 03L 404H and 405H production well pad (Site). The Site is located in Unit L, Section 3, Township 23 North, Range 8 West in San Juan County, New Mexico (Figure 1). The Site consists of two oil-production wells (Chaco 2308 03L #404H and Chaco 2308 03L #405H) owned by Enduring and associated equipment within a lined secondary containment (including several aboveground storage tanks, pumps, separators, and other equipment). Additionally, Whiptail owns the onsite gathering pipeline, an automated custody transfer unit, and meter house at the Site. The well pad is located on land owned by the United States Bureau of Land Management (BLM).

## SITE BACKGROUND

A release of crude oil and produced water was first discovered at the Site on August 17, 2020. The fluids were observed seeping through the liner and into the secondary containment, as well as on the ground surface to the southwest, south, and southeast sides of the lined secondary containment. Several pipelines for the transfer of produced water and crude oil are located underneath the liner of the secondary containment. Enduring shut in both oil wells and the pipelines at the Site and was able to control the release. Vacuum trucks were used to recover approximately 80 barrels (bbls) of standing fluids which were transported for off-site disposal. Based on pressure tests performed by Enduring and Whiptail, it appears that the release of crude oil/produced water originated from piping that belonged to Whiptail underneath the liner. Whiptail provided verbal or email notifications to the BLM and New Mexico Oil Conservation Division (NMOCD) on August 17, 2020. Whiptail reported the release to the NMOCD on a *Release Notification and Corrective Action Form C-141* (Form C-141) on August 19, 2020 and was subsequently assigned Incident Number NRM2023331895. Whiptail estimated approximately 100 barrels (bbls) of crude oil/ produced water mix was released, of which 70 to 80 bbls were released outside of a lined containment.

During a site visit on August 18, 2020, during emergency response activities, WSP observed standing fluid along with saturated and stained soil within and around the secondary containment (Enclosure A, Photographs 1, 2, and 3). The release flowed away from the secondary containment to the west but remained on pad. It was observed south of the containment around equipment and following several drainages leading off pad. South of the pad, it spread into a vegetated area. To the east, the release flowed into a dry wash and flowed south approximately 850 feet and into Kimbeto Wash (Enclosure A, Photograph 4).

WSP USA  
848 EAST 2ND AVENUE  
DURANGO CO 81301

Tel.: 970-385-1096  
wsp.com





## SITE RECEPTORS

Assessment of potential nearby receptors was conducted through desktop reviews of topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, United States Geological Survey (USGS) GIS maps, New Mexico Office of the State Engineer database, and aerial photographs, as well as site-specific observations.

Based on United States Geological Survey (USGS) geologic mapping, the Site is located within the Tertiary 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 interbedded black carbonaceous mudstones and white, coarse-grained sandstones. This formation ranges in thickness from 418 to 2,232 feet. The Nacimiento Formation overlies the Ojo Alamo sandstone formation, which is the shallowest water-bearing unit beneath the Site (Stone, Lyford, Frenzel, Mizell, & Padgett, 1983).

No wellhead protection areas, springs, or domestic/stock wells are located within a half mile from the site (Figure 2). The nearest water-supply well (livestock well SJ-04195) is located approximately 1.5 miles southeast of the Site with depth to water of approximately 290 feet. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 3). The nearest significant watercourse is a tributary wash to Kimbeto wash located approximately 75 east of the well pad. Surface land use surrounding the Site consists primarily of oil and gas development and potential livestock grazing. No occupied permanent residence or structures, including schools, hospitals, institutions, and/or churches, are located within 300 feet of the Site. The Site is not within the area of a subsurface mine or unstable area and is not within the 100-year floodplain.

## REGULATORY CLOSURE CRITERIA

WSP characterized the Site according to *Table 1, Closure Criteria for Soils Impacted by a Release*, of 19.15.29.12 of the New Mexico Administrative Code (NMAC). Due to the Site's proximity to a significant watercourse (adjacent wash shown on Figures 2 and 3), the following NMOCD Table 1 Closure Criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

Additionally, Whiptail proposed a variance to the confirmation-sampling frequency of 200 square feet presented in Subsection D of 19.15.29.12 NMAC. Based on the large size of the impacted area, NMOCD approved a variance to collect excavation-confirmation samples at a frequency of every 400 square feet from the excavation floors and sidewalls. The NMOCD approval is attached as Enclosure B.

## SITE ACTIVITIES AND FINDINGS

After the initial release discovery, Enduring/Whiptail subcontracted vacuum trucks to capture standing fluids at the Site. Approximately 80 bbls were recovered on August 17, 2020 and transported for disposal. To visually inspect for surface impacts at the Site, drone aerial photographs were captured by Enduring on August 18, 2020. The aerial photographs were used to initially delineate the surface impacts and guide initial excavation efforts. WSP mapped the release footprint using a handheld Global Positioning System (GPS) unit (able to achieve a horizontal accuracy of 1.5 feet) and estimated the release footprint to encompass approximately 42,000 square feet based on the presence of fluid and stained soil.

Prior to beginning excavation work, an archaeological survey was performed by Western Cultural Resource Management, Inc. (WCRM). The survey results indicated no cultural materials were encountered and excavation activities could commence (survey results are included as Enclosure C). Dirt-moving equipment was mobilized to the Site on August 19, 2020 to begin excavation of impacted soil. Three excavation areas were established at the Site and have been named the "Pad Area" (excavation on the well pad), and off-pad excavations "Southwest (SW) Area" and the "Wash Area" (indicated on Figure 4).





## WASH AREA REMEDIAL EXCAVATION

Impacted soil was first removed from the tributary wash and Kimbeto Wash located east and south of the well pad. As the excavation progressed, WSP collected field-screening soil samples from the excavation floors and sidewalls using a photoionization detector (PID) and Hach® chloride QuanTab® test strips. Based on field screening, the Wash Area excavation was advanced to a maximum depth of 4 feet bgs (Enclosure A, Photograph 5). Once field-screening results indicated that impacted soils had been removed, notice was given to the NMOCD and BLM to collect confirmation floor and sidewall samples from the Wash Area excavation.

Seventeen floor and 17 sidewall confirmation samples were collected by WSP on August 31, 2020 and consisted of five-point composite samples collected every 400 square feet from the excavation floor and sidewalls. Photograph 4 (Enclosure A) was taken from the Wash Area excavation inside the tributary wash.

The samples were handled and transported at or below 4 degrees Celsius (°C) under chain-of-custody procedures to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico for analysis of benzene, toluene, ethylbenzene, and xylene compounds (BTEX) by United States Environmental Protection Agency (EPA) method 8021, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), TPH-motor oil range organics (MRO) by EPA Method 8015, and chloride by EPA method 300.0. Sampling areas for the Wash Area excavation are presented on Figure 5.

Based on the laboratory analytical data, all confirmation sample results were either non-detect or below the NMOCD Table 1 Closure Criteria with the exception of two sidewall samples (“Wash SW08” and “Wash SW10”). Additional soil was removed from these areas and confirmation samples were collected on September 3, 2020 to confirm the successful removal of impacted soil. Results from samples “Wash SW08-B” and “Wash SW10-B” were in compliance with Table 1 Closure Criteria. Based on the confirmation-sample results collected from the Wash Area, all impacted soil was successfully removed to below Table 1 Closure Criteria. Analytical results are summarized in Table 1 of this report. Laboratory analytical results are included in Enclosure D.

## SOUTHWEST AREA REMEDIAL EXCAVATION

Once the Wash excavation was completed, impacted soil was removed from the Southwest Area (Enclosure A, Photograph 6). WSP collected field-screening soil samples as described above from the Southwest Area excavation floors and sidewalls to assess the progress of the excavation. Based on field screening, the Southwest Area excavation was advanced to a maximum depth of 6 feet bgs. Once field-screening results indicated that impacted soils had been removed, notice was again given to the NMOCD and BLM to collect confirmation floor and sidewall samples. Fourteen floor and nine sidewall confirmation samples were collected by WSP on September 3, 2020 and consisted of five-point composite samples collected every 400 square feet from the excavation floor and sidewalls. Soil samples were collected in the same manner described in Section 2.1.1 above. Samples were submitted to Hall for analysis of BTEX, TPH-GRO, TPH-DRO, TPH-MRO, and chloride.

Based on the analytical data, all confirmation sample results were either non-detect or below the NMOCD Table 1 Closure Criteria, with the exception of three sidewall samples (“SW Area SW01”, “SW Area SW03”, and SW Area SW04”). Due to a soil stockpile located just to the north of this area, additional soil could not be immediately removed (shown on Photograph 5, Enclosure A). Once the stockpile was removed, additional impacted soil was excavated from the north sidewall and confirmation samples were collected from the floor (six samples) and sidewall (six samples) of the excavation on February 18, 2021. The analytical results from this re-sampling event were below the NMOCD Table 1 Closure Criteria indicating that all impacted soil had been successfully removed from the Southwest Area excavation.

Sampling areas for the Southwest Area excavation are presented on Figure 6. Analytical results are summarized in Table 2. Laboratory analytical results are included in Enclosure D.

## SOIL DELINEATION ACTIVITIES

To vertically and laterally delineate soil impacts remaining on the well pad, WSP returned to the Site on October 19 and 20, 2020 and used a hollow-stem auger drill rig and to advance 11 borings to depths of 15 feet bgs. In areas





inaccessible to the drill rig, WSP advanced three (3) hand-auger borings until refusal was encountered. Borings were positioned to supplement existing information and soil data previously collected at the Site. Several soil borings were advanced in locations near the points of release and/or locations with obvious soil staining to vertically delineate soil impacts on the well pad. Additional borings were positioned in locations outside of obvious impacts to laterally delineate the release. Boring locations are presented on Figure 7.

Continuous soil samples were collected and logged by an WSP geologist and described using the Unified Soil Classification System (USCS). Soil was inspected for visual staining and the presence or absence of odor. The soil headspace was field screened at 2.5-foot intervals using a PID to monitor for the presence of organic vapors. In addition, Hach® Quantab® titrator strips were utilized to field screen for chloride in the soil at 2.5-foot intervals. Soil samples were collected from the most impacted soil interval based on field-screening results and from the terminus of each boring. Soil samples were collected directly into pre-cleaned jars. The samples were handled and transported under chain-of-custody procedures to Hall and analyzed for BTEX, TPH-GRO, TPH-DRO, TPH-MRO, and chloride. Drilling and sampling equipment were decontaminated prior to each use. Boring logs are included as Enclosure E.

Based on the laboratory analytical data, the majority of impacted soil remaining at the Site was located within the secondary containment. Surface-soil impacts extend to the east, south, and west of the containment; however, these impacts were estimated to be limited to the top 2 to 4 feet of soil and did not extend beyond the obvious surface staining (as indicated by data from the outer-most borings). TPH and chloride concentrations above NMOCD Table 1 Closure Criteria within the secondary containment extend to depths of at least 9 feet bgs. Because of access restrictions, WSP boring BH12 and a boring advanced by Enduring/Envirotech, Inc. (SB-5, drilled in September 2020) were located near the points of release using a hand auger. Because of the shallow bedrock at the site, the hand-auger borings were unable to achieve greater depths.

Analytical results from the WSP delineation effort, and data collected by Enduring/Envirotech, Inc., are summarized in Table 3. Laboratory analytical results are included in Enclosure F.

## PAD REMEDIAL EXCAVATION

Based on the results of the soil delineation described in Section 2.4, excavation of the on-pad impacted soil began in December 2020 (Enclosure A, Photographs 7 and 8). WSP was on-Site to collect field-screening soil samples as the excavation progressed. Based on field screening and analytical results, the on-pad excavation was advanced to a maximum depth of 12 feet bgs. Once field-screening results indicated that impacted soils had been removed, notice was given to the NMOCD and BLM to collect confirmation floor and sidewall samples from the excavation. Several rounds of confirmation sampling were conducted between December 2020 and February 2021. In total, 46 floor and 21 sidewall samples were collected at a frequency of one five-point composite sample every 400 square feet from the excavation floor and sidewalls. The samples were handled and transported at or below 4 degrees Celsius (°C) under chain-of-custody procedures to Hall for analysis of BTEX, TPH-GRO, TPH-DRO, TPH-MRO, and chloride. Sampling areas for the on-pad excavation are presented on Figure 8.

Based on the laboratory analytical data, all confirmation sample results were either non-detect or below the NMOCD Table 1 Closure Criteria with the exception of four floor samples and four sidewall samples, as indicated on Table 4. Additional soil was removed from these areas and confirmation samples were recollected to confirm the successful removal of impacted soil. Based on the confirmation-sample results collected from the on-pad excavation, all impacted soil was successfully removed to below Table 1 Closure Criteria. Analytical results are summarized in Table 4. Laboratory analytical results are included in Enclosure D.

## CONCLUSION AND RECOMMENDATIONS

In response to the subject release, 875 cubic yards of impacted soil was removed from the Wash Area excavation, 1,550 cubic yards from the SW Area excavation, and 8,084 cubic yards from the on-pad excavation, with impacted soil disposed at an off-Site facility. Based on confirmation soil samples collected from the remedial excavations, all petroleum hydrocarbon and chloride-impacted soil has been successfully removed from the Site. As such, Enduring and Whiptail request no further action and Site closure from the NMOCD and BLM.





Since remediation events, the excavations have been backfilled and recontoured to match pre-existing conditions (Enclosure A, Photographs 9 and 10). Additionally, the previously vegetated area south of the well pad (Southwest Area excavation) was backfilled with 6 inches of locally-sourced topsoil and seeded with a BLM-approved seed mix in accordance with the BLM-approved reclamation plan (Enclosure G).

## 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.

WSP appreciates the opportunity to provide these environmental services to Whiptail and Enduring. Please contact either of the undersigned with any questions at (970) 385-1096.

Kind regards,

A handwritten signature in black ink, appearing to read 'Stuart Hyde'.

Stuart Hyde, L.G.  
Environmental Geologist

A handwritten signature in black ink, appearing to read 'Steve Kahn'.

Steve Kahn, P.E.  
Managing Director

cc: Alex Campbell, Enduring Resources IV, LLC  
Ernest Johnson, Whiptail Midstream

## Attachments

Figure 1: Site Location Map  
Figure 2: Site Receptor Map  
Figure 3: Proximity to Watercourse, Lakebed, Sinkhole, or Playa Lake  
Figure 4: Excavation Areas  
Figure 5: Wash Area Excavation  
Figure 6: Southwest Area Excavation  
Figure 7: Soil Delineation Analytical Results  
Figure 8: Pad Area Excavation

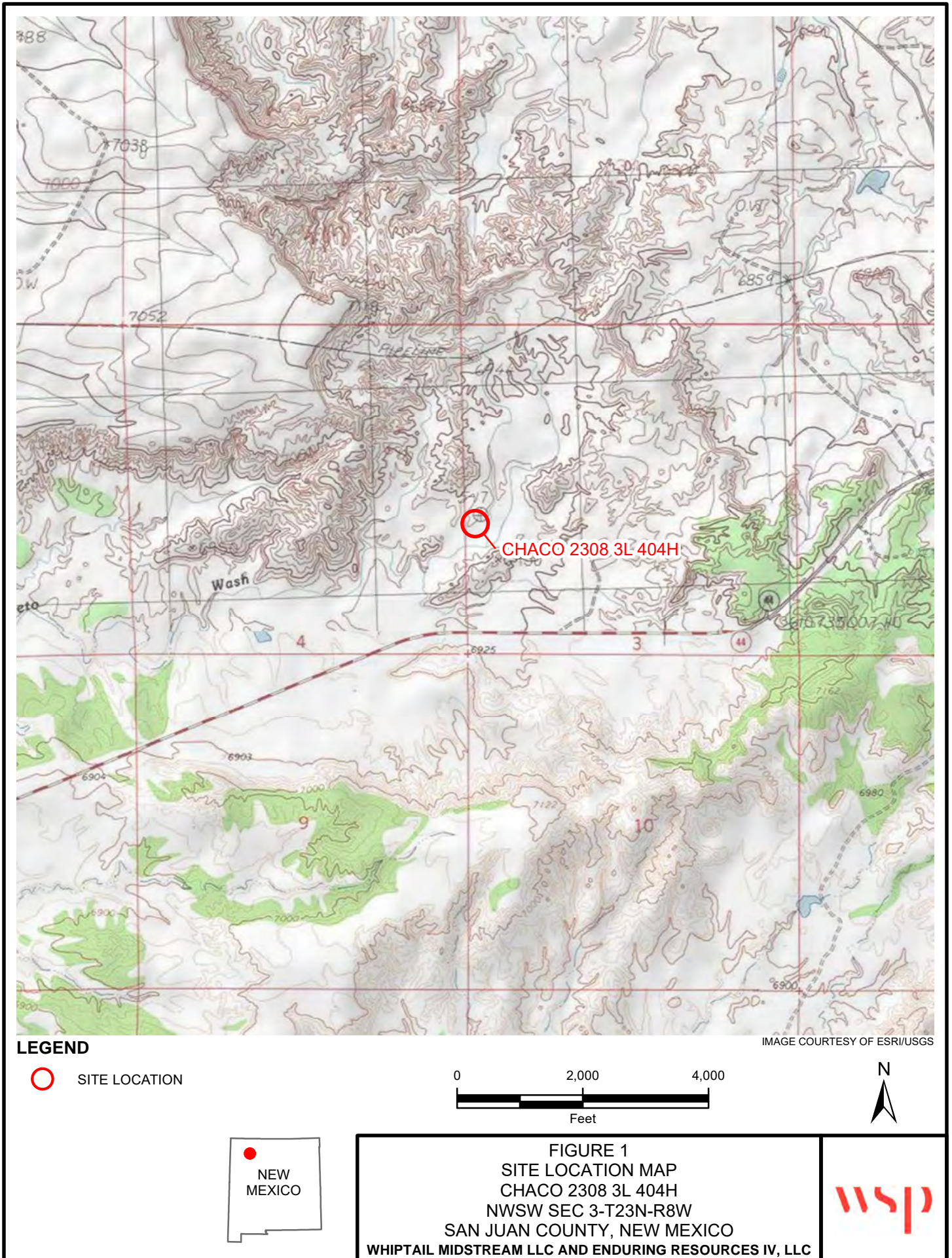
Table 1: Wash Area Excavation Soil Analytical Results  
Table 2: Southwest Area Excavation Soil Analytical Results  
Table 3: Soil Delineation Analytical Results  
Table 4: Well Pad Excavation Soil Analytical Results

Enclosure A: Photographic Log  
Enclosure B: NMOCD Sampling Frequency Variance Approvals  
Enclosure C: WCRM Archaeological Emergency Survey  
Enclosure D: Remedial Excavation Soil Analytical Laboratory Reports  
Enclosure E: Soil Delineation Boring Logs  
Enclosure F: Site Delineation Soil Analytical Laboratory Reports  
Enclosure G: Chaco 2308 03L #404H Off-Pad Reclamation

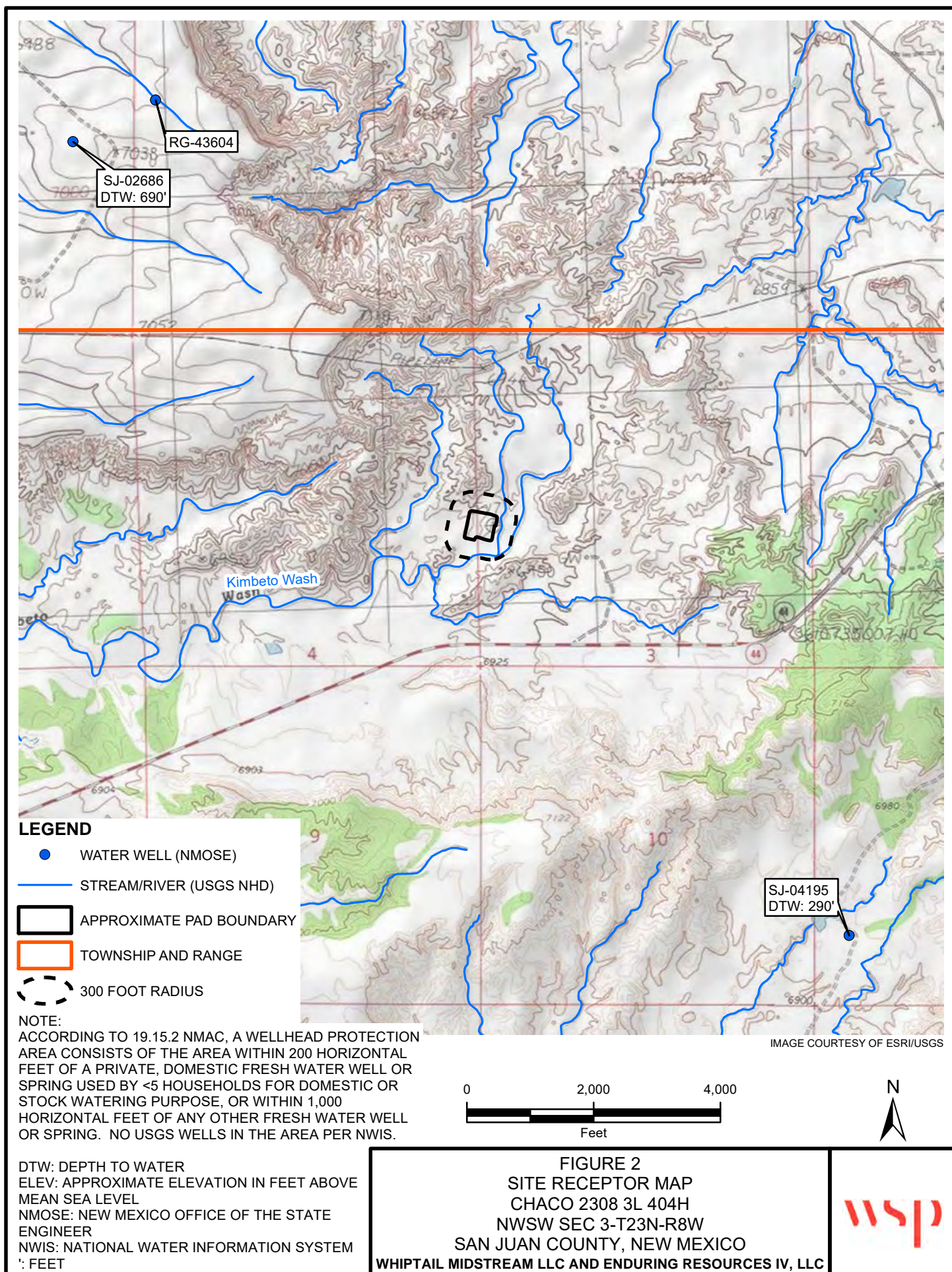


## FIGURES

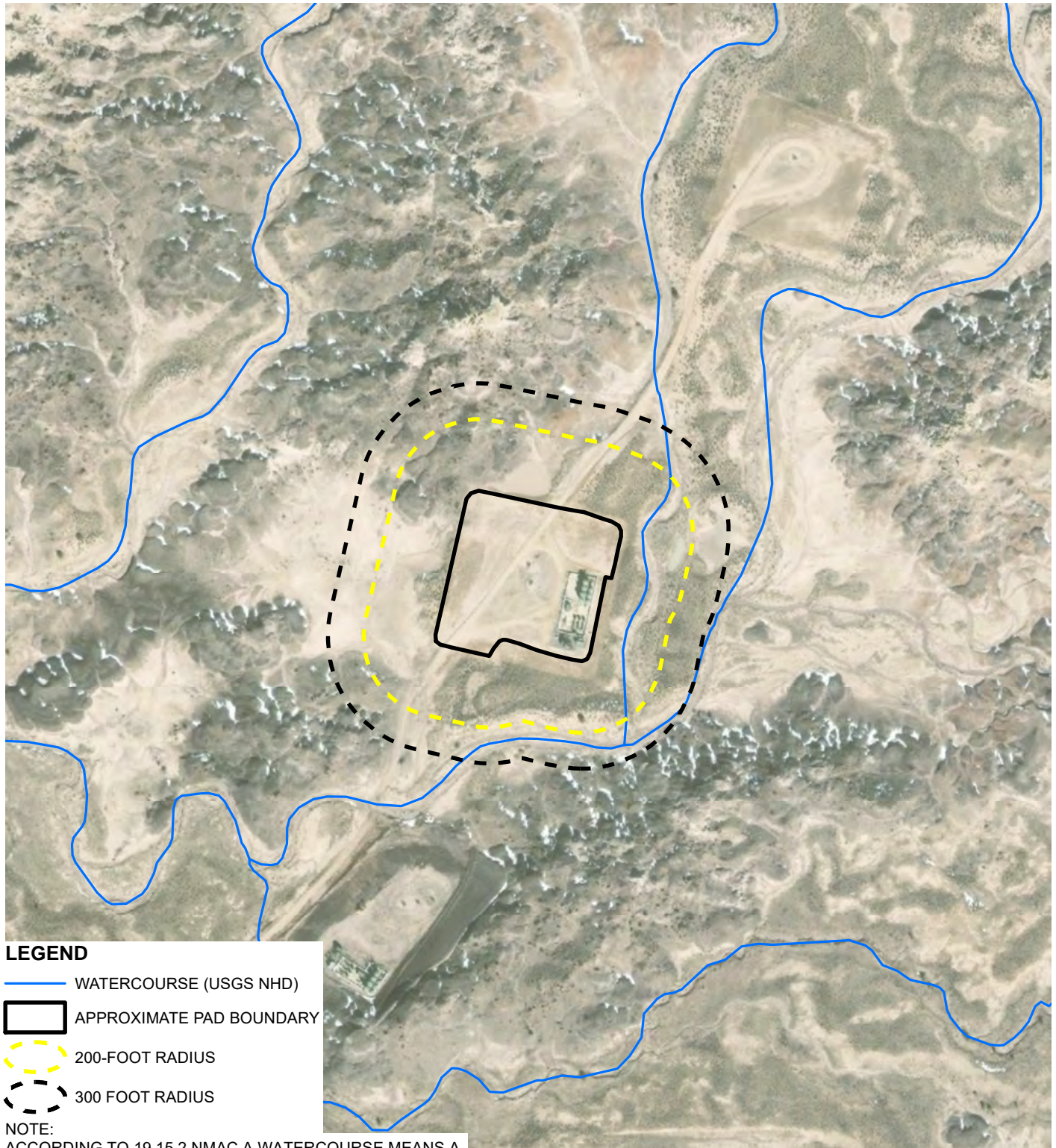










**LEGEND**

- WATERCOURSE (USGS NHD)
- APPROXIMATE PAD BOUNDARY
- - - 200-FOOT RADIUS
- - - 300 FOOT RADIUS

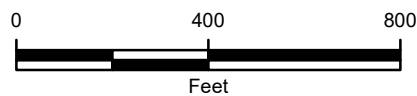
**NOTE:**

ACCORDING TO 19.15.2 NMAC A WATERCOURSE MEANS A RIVER, CREEK, ARROYO, CANYON, DRAW, OR WASH OR OTHER CHANNEL HAVING DEFINITE BANKS AND BED WITH VISIBLE EVIDENCE OF OCCASIONAL FLOW OF WATER.

THERE ARE NO SINKHOLES, LAKEBEDS OR PLAYA LAKES WITHIN THE BOUNDARIES OF THIS MAP USING MAPPED DATA FROM THE USFS NWI AND USGS.

NHD: NATIONAL HYDROGRAPHY DATASET  
 NMAC: NEW MEXICO ADMINISTRATIVE CODE  
 NM OSE: NEW MEXICO OFFICE OF THE  
 STATE ENGINEER  
 USGS: UNITED STATES GEOLOGICAL SURVEY

IMAGE COURTESY OF ESRI

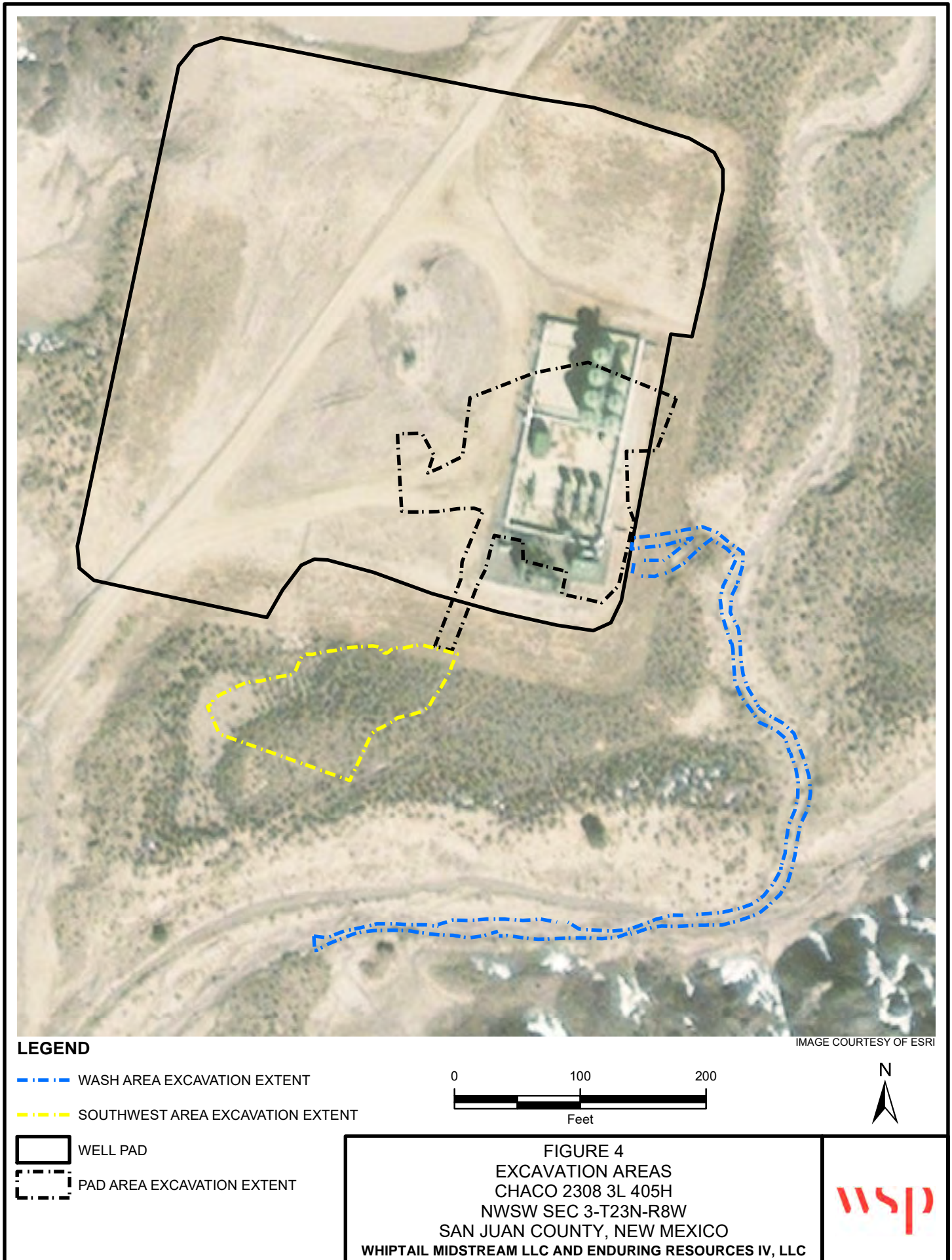


**FIGURE 3**  
 PROXIMITY TO WATERCOURSE, LAKEBED,  
 SINKHOLE, OR PLAYA LAKE  
 CHACO 2308 3L 404H  
 NWSW SEC 3-T23N-R8W  
 SAN JUAN COUNTY, NEW MEXICO

**WHIPTAIL MIDSTREAM LLC AND ENDURING RESOURCES IV, LLC**









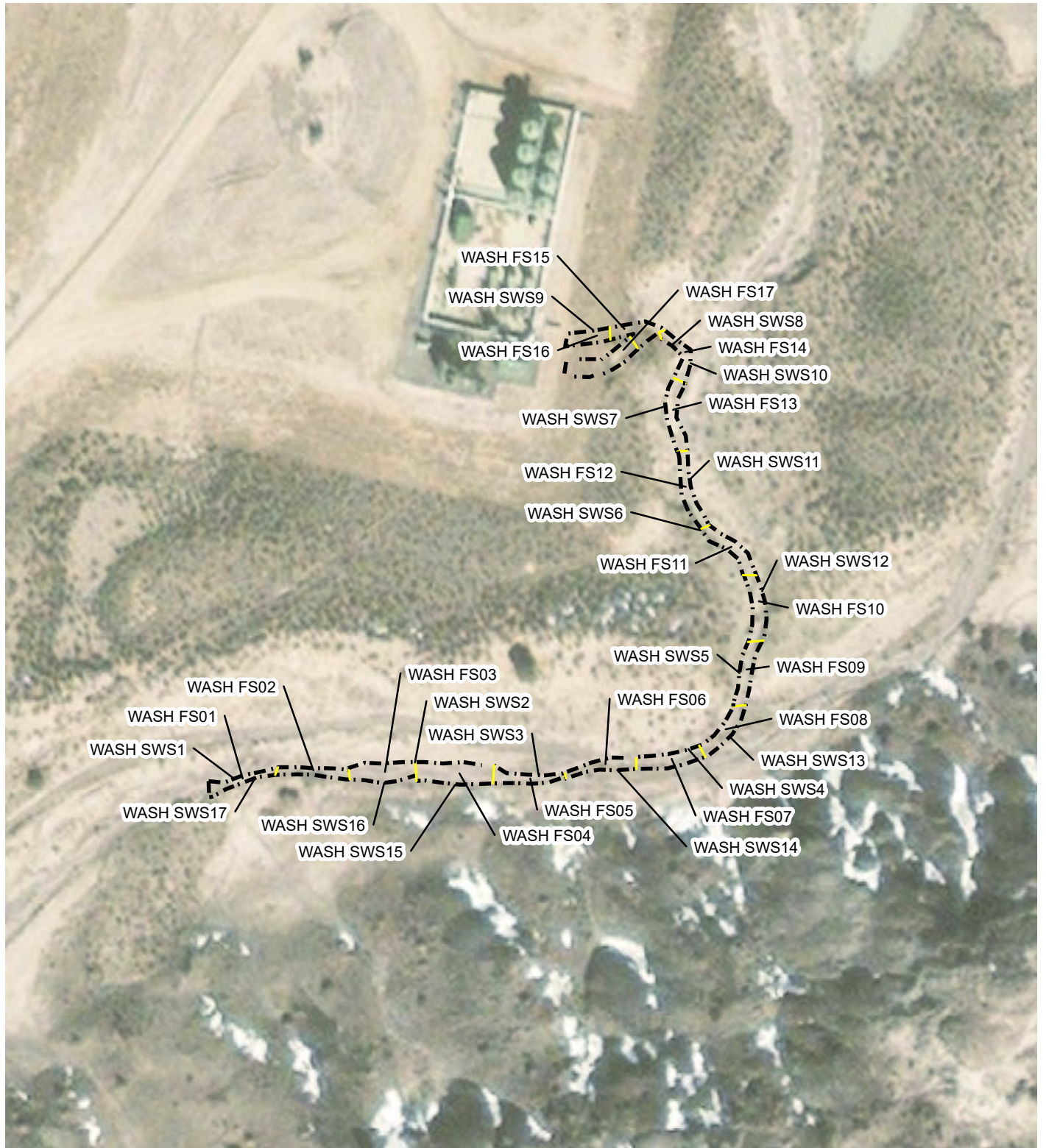


IMAGE COURTESY OF ESRI

# LEGEND

- WASH AREA EXCAVATION EXTENT
- FLOOR SAMPLING AREA

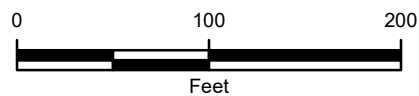


FIGURE 5  
WASH AREA EXCAVATION  
CHACO 2308 3L 404H  
NWSW SEC 3-T23N-R8W  
SAN JUAN COUNTY, NEW MEXICO  
WHIPTAIL MIDSTREAM LLC AND ENDURING RESOURCES IV, LLC





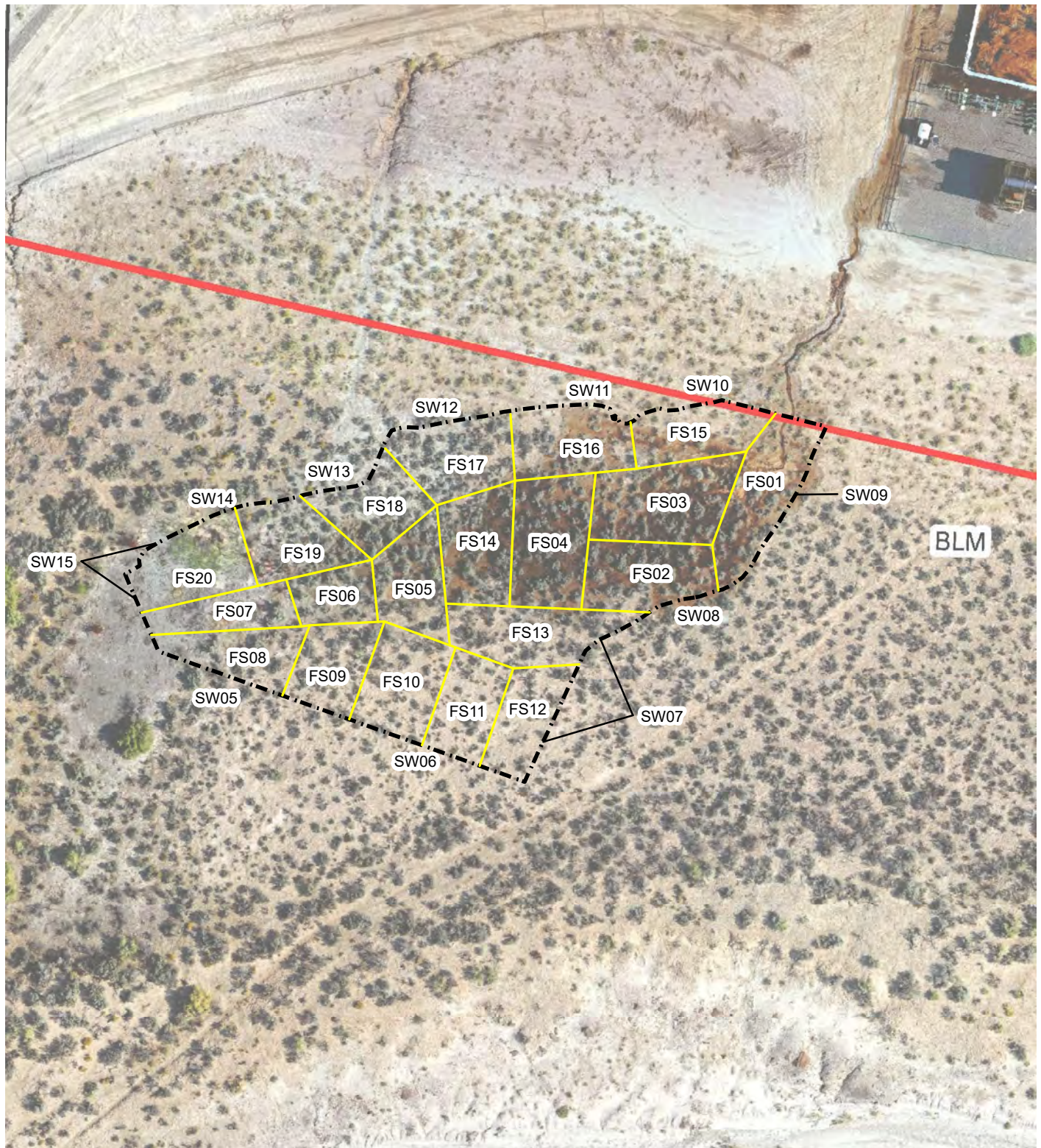
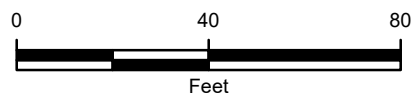


IMAGE COURTESY OF ENDURING RESOURCES, AUGUST 18, 2020

**LEGEND**

- SOUTHWEST AREA EXCAVATION EXTENT
- FLOOR SAMPLING AREA



**FIGURE 6**  
**SOUTHWEST AREA EXCAVATION**  
**CHACO 2308 3L 405H**  
**NWSW SEC 3-T23N-R8W**  
**SAN JUAN COUNTY, NEW MEXICO**  
**WHIPTAIL MIDSTREAM LLC AND ENDURING RESOURCES IV, LLC**



P:\Enduring Resources\GIS\MXD\077920009\_CHACO 2308 03L #405H\TE077920011\_FIG06\_SW AREA\_EXC SAMPLE LOC\_2021.mxd







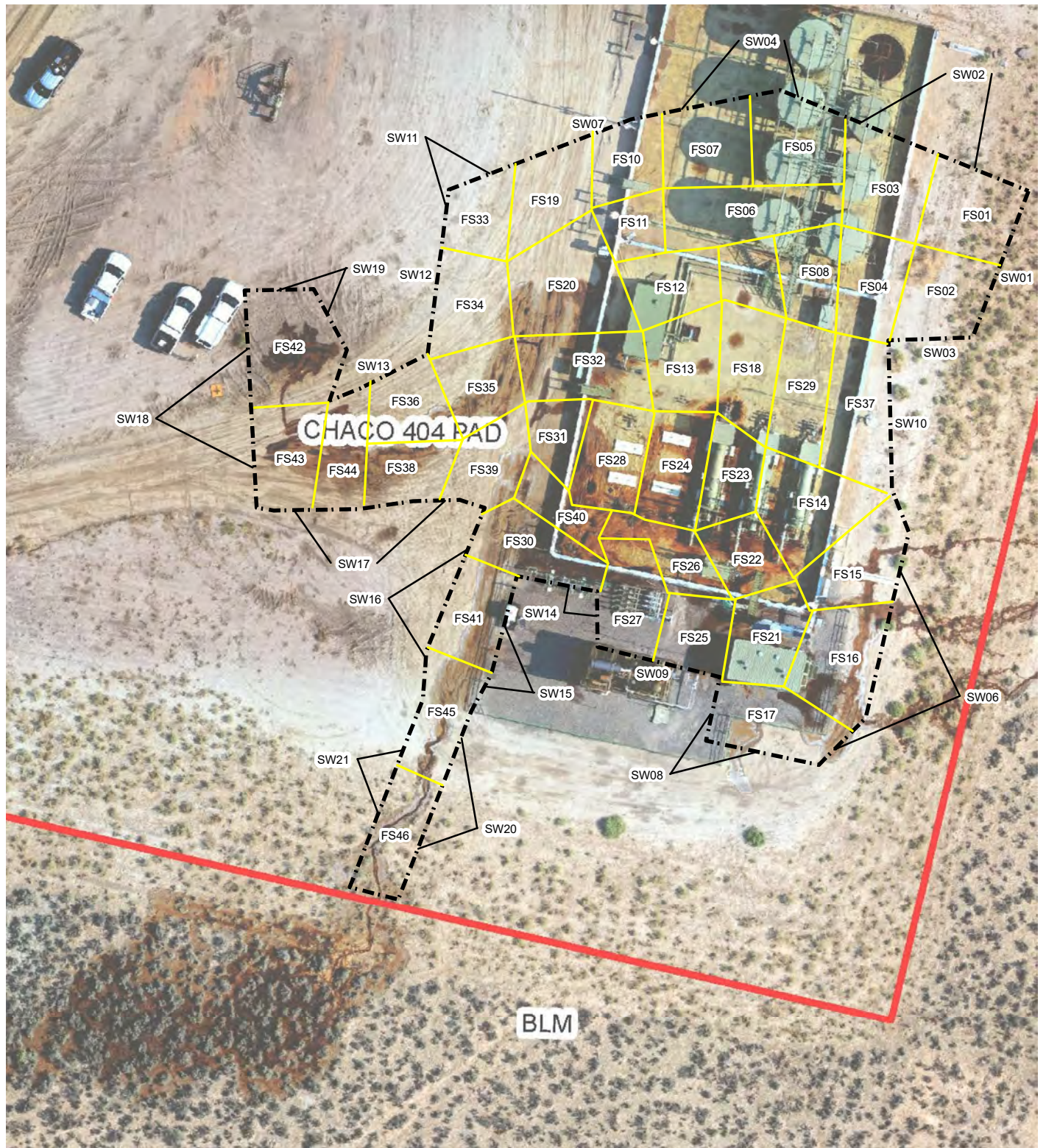
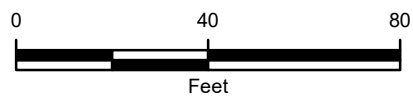


IMAGE COURTESY OF ENDURING RESOURCES, AUGUST 18, 2020

**LEGEND**

- FLOOR SAMPLING AREA
- PAD AREA EXCAVATION EXTENT



**FIGURE 8**  
**PAD AREA EXCAVATION**  
**CHACO 2308 03L 404H**  
**NWSW SEC 3-T23N-R8W**  
**SAN JUAN COUNTY, NEW MEXICO**  
**WHIPTAIL MIDSTREAM LLC AND ENDURING RESOURCES IV, LLC**



P:\Enduring Resources\GIS\IMXD\077920009\_CHACO 2308 03L #405H\TE077920011\_FIG08\_CHACO2308\_03L\_404H\_EXC AREAS\_03172021.mxd



## TABLES



Table 1

Wash Area Excavation Soil Analytical Results  
CHACO 2308 03L #404H  
San Juan County, New Mexico

Sample ID	Sample Date	Sample Depth (feet)	Chloride (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			600	10	50	NE	NE	NE	100
Excavation Floor Samples									
Wash FS01	8/31/2020	4'	<60	<0.022	<0.202	<9.0	<4.5	<45	<58.5
Wash FS02	8/31/2020	4'	<59	<0.021	<0.189	<9.3	<4.2	<47	<60.5
Wash FS03	8/31/2020	4'	<59	<0.025	<0.227	<9.9	<5.1	<49	<64.0
Wash FS04	8/31/2020	4'	<60	<0.026	<0.228	<9.6	<5.1	<48	<62.7
Wash FS05	8/31/2020	4'	<59	<0.027	<0.245	<9.4	<5.4	<47	<61.8
Wash FS06	8/31/2020	4'	<60	<0.019	<0.167	<9.0	<3.7	<45	<57.7
Wash FS07	8/31/2020	4'	<60	<0.021	<0.190	<9.7	<4.2	<49	<62.9
Wash FS08	8/31/2020	4'	<60	<0.022	<0.199	<9.4	<4.4	<47	<60.8
Wash FS09	8/31/2020	4'	<60	<0.020	<0.181	<9.2	<4.0	<46	<59.2
Wash FS10	8/31/2020	4'	<60	<0.025	<0.221	<9.4	<4.9	<47	<61.3
Wash FS11	8/31/2020	4'	<59	<0.023	<0.208	<9.3	<4.6	<46	<59.9
Wash FS12	8/31/2020	4'	<61	<0.021	<0.189	<9.7	<4.2	<48	<61.9
Wash FS13	8/31/2020	3'	<60	<0.018	<0.159	<9.6	<3.5	<48	<61.1
Wash FS14	8/31/2020	3'	<60	<0.019	<0.170	<9.1	<3.8	<45	<57.9
Wash FS15	8/31/2020	3'	250	<0.028	<0.250	24	<5.6	<48	24
Wash FS16	8/31/2020	2.5'	<60	<0.019	<0.170	<9.8	<3.8	<49	<62.6
Wash FS17	8/31/2020	2.5'	150	<0.018	<0.162	48	<3.6	<48	48
Excavation Sidewall Samples									
Wash SW01	8/31/2020	1' - 3'	<60	<0.026	<0.230	<9.5	<5.2	<47	<61.7
Wash SW02	8/31/2020	0.5' - 2'	<60	<0.020	<0.183	<9.9	<4.1	<50	<64
Wash SW03	8/31/2020	1' - 3'	<59	<0.023	<0.211	<9.1	<4.7	<46	<59.8
Wash SW04	8/31/2020	0.5' - 3'	<60	<0.027	<0.245	33	<5.4	<48	33
Wash SW05	8/31/2020	0.5' - 3'	<60	<0.028	<0.248	<9.3	<5.5	<47	<61.8
Wash SW06	8/31/2020	0.5' - 3'	<60	<0.019	<0.168	<9.2	<3.7	<46	<58.9
Wash SW07	8/31/2020	0.5' - 2.5'	<60	<0.019	<0.175	<9.1	<3.9	<45	<58.0
Wash SW08 (1)	8/31/2020	0.5' - 2'	490	<0.10	<0.93	1,200	<21	910	2,110
Wash SW08-B	9/3/2020	0.5' - 2'	<60	<0.018	<0.162	<9.4	<3.6	<47	<60.0
Wash SW09	8/31/2020	0.5' - 2'	<60	<0.021	<0.192	17	<4.3	<45	17
Wash SW10 (1)	8/31/2020	0.5' - 3'	180	<0.019	<0.174	100	<3.9	160	260
Wash SW10-B	9/3/2020	0.5' - 3'	<60	<0.018	<0.163	<9.7	<3.6	<48	<61.3
Wash SW11	8/31/2020	1' - 4'	68	<0.020	<0.177	<9.5	<3.9	<48	<61.4
Wash SW12	8/31/2020	1' - 3.5'	<60	<0.022	<0.201	<8.9	<4.5	<44	<57.4
Wash SW13	8/31/2020	0.5' - 3'	<60	<0.021	<0.186	<8.9	<4.1	<44	<57.0
Wash SW14	8/31/2020	1' - 3'	<60	<0.023	<0.208	<9.4	<4.6	<47	<61.0
Wash SW15	8/31/2020	1' - 3.5'	<61	<0.021	<0.185	<9.3	<4.1	<47	<60.4
Wash SW16	8/31/2020	0.5' - 3'	<60	<0.023	<0.208	<9.8	<4.6	<49	<63.4
Wash SW17	8/31/2020	1' - 3'	<60	<0.020	<0.183	14	<4.1	<47	14

Notes:

(1) - Soil was subsequently removed from the sidewall in this location and resampled. Sidewall samples collected after additional soil removal are indicated with a "B".

mg/kg - milligrams per kilograms

DRO - diesel range organics

GRO - gasoline range organics

MRO - motor oil range organics

TPH- total petroleum hydrocarbons

NE - Not Established

< indicates result is less than the stated laboratory method practical quantitation limit

**BOLD** indicates results exceed the higher of the background sample result or practical quantitation limit



Table 2

Southwest Area Excavation Soil Analytical Results  
CHACO 2308 03L #404H  
San Juan County, New Mexico

Sample ID	Sample Date	Sample Depth (feet)	Chloride (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			600	10	50	NE	NE	NE	100
Excavation Floor Samples									
SW Area FS01	9/3/2020	6'	220	<0.025	<0.225	<9.2	<5.0	<46	<60.2
SW Area FS02	9/3/2020	6'	540	<0.025	<0.225	<9.3	<5.0	<46	<60.3
SW Area FS03	9/3/2020	6'	460	<0.023	<0.208	<9.1	<4.6	<46	<59.7
SW Area FS04	9/3/2020	6'	230	<0.025	<0.225	<9.1	<5.0	<46	<60.1
SW Area FS05	9/3/2020	4.5'	490	<0.025	<0.225	<9.1	<5.0	<46	<60.1
SW Area FS06	9/3/2020	2'	<59	<0.026	<0.230	<9.9	<5.2	<49	<64.1
SW Area FS07	9/3/2020	2'	<60	<0.023	<0.203	<9.6	<4.5	<48	<62.1
SW Area FS08	9/3/2020	2'	<61	<0.023	<0.208	<9.9	<4.6	<49	<63.5
SW Area FS09	9/3/2020	2'	<61	<0.019	<0.167	<9.4	<3.7	<47	<60.1
SW Area FS10	9/3/2020	2'	<60	<0.021	<0.188	<9.4	<4.2	<47	<60.6
SW Area FS11	9/3/2020	2'	<60	<0.021	<0.185	<9.3	<4.1	<47	<60.4
SW Area FS12	9/3/2020	2'	<60	<0.020	<0.176	<9.4	<3.9	<47	<60.3
SW Area FS13	9/3/2020	6'	<60	<0.024	<0.216	<9.6	<4.8	<48	<62.4
SW Area FS14	9/3/2020	6'	150	<0.026	<0.230	<9.5	<5.2	<48	<62.7
SW Area FS15	2/18/2021	6'	<60	<0.025	<0.098	<9.1	<4.9	<46	<46
SW Area FS16	2/18/2021	6'	73	<0.023	<0.092	<9.1	<4.6	<46	<46
SW Area FS17	2/18/2021	6'	72	<0.023	<0.092	<9.6	<4.6	<48	<48
SW Area FS18	2/18/2021	6'	<59	<0.025	<0.098	<8.5	<4.9	<43	<43
SW Area FS19	2/18/2021	6'	<60	<0.024	<0.097	<9.6	<4.8	<48	<48
SW Area FS20	2/18/2021	6'	<60	<0.024	<0.094	<9.7	<4.7	<48	<48
Excavation Sidewall Samples									
SW Area SW01 (1)	9/3/2020	1' - 6'	<b>1,000</b>	<0.018	<0.165	<9.7	<3.7	<48	<61.4
SW Area SW02 (1)	9/3/2020	1' - 6'	280	<0.019	<0.168	<9.7	<3.7	<48	<61.4
SW Area SW03 (1)	9/3/2020	1' - 6'	<b>630</b>	<0.020	<0.181	<9.5	<4.0	<47	<60.5
SW Area SW04 (1)	9/3/2020	0.5' - 2'	<b>1,000</b>	<0.020	<0.181	<9.7	<4.0	<48	<61.7
SW Area SW05	9/3/2020	0.5' - 2'	<60	<0.025	<0.225	<9.2	<5.0	<46	<60.2
SW Area SW06	9/3/2020	0.5' - 2'	<60	<0.025	<0.225	<9.8	<5.0	<49	<63.8
SW Area SW07	9/3/2020	0.5' - 2'	<60	<0.025	<0.225	<9.8	<5.0	<49	<63.8
SW Area SW08	9/3/2020	0.5' - 4'	<60	<0.025	<0.225	<9.6	<5.0	<48	<62.6
SW Area SW09	9/3/2020	1' - 6'	270	<0.025	<0.225	<9.4	<5.0	<47	<61.4
SW Area SW10	2/18/2021	1' - 6'	280	<0.025	<0.099	<9.5	<5.0	<47	<47
SW Area SW11	2/18/2021	1' - 6'	220	<0.025	<0.099	<9.8	<4.9	<49	<49
SW Area SW12	2/18/2021	1' - 6'	<60	<0.025	<0.098	<9.8	<4.9	<49	<49
SW Area SW13	2/18/2021	1' - 6'	100	<0.024	<0.098	<9.7	<4.9	<48	<48
SW Area SW14	2/18/2021	1' - 6'	300	<0.025	<0.099	<9.9	<5.0	<49	<49
SW Area SW15	2/18/2021	1' - 6'	<60	<0.025	<0.099	<9.7	<5.0	<49	<49

Notes:  
mg/kg - milligrams per kilograms  
DRO - diesel range organics  
GRO - gasoline range organics  
MRO - motor oil range organics  
TPH- total petroleum hydrocarbons  
NE - not established  
(1) - soil from these areas subsequently removed and sidewalls resampled (SW10 through SW15)  
< indicates result is less than the stated laboratory method practical quantitation limit  
**BOLD** indicates results exceed the higher of the background sample result or practical quantitation limit



Table 3  
Soil Delineation Analytical Results  
CHACO 2308 03L #404H  
San Juan County, New Mexico

Sample ID	Sample Date	Sample Depth (ft)	Chloride Field Screening (ppm)	Chloride (mg/kg)	PID Field Screening (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			NE	600	NE	10	NE	NE	NE	50	NE	NE	NE	100
Enduring/Envirotech Soil Borings														
SB-1 @ 4'	9/14/2020	4	---	198	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-2 @4'	9/14/2020	4	---	114	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-3 @ 4'	9/14/2020	4	---	481	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-4 @ 4'	9/14/2020	4	---	83.3	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-5 @ 8'	9/14/2020	8	---	227	---	<0.0250	<0.0250	<0.0250	0.735	0.735	<20.0	989	429	1,420
SB-6 @ 6'	9/14/2020	6	---	116	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	48.0	<50.0	48.0
SB-7 @ 4'	9/14/2020	4	---	<20.0	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-8 @ 0-6"	9/17/2020	0 - 0.5	---	659	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	2,130	961	3,091
SB-8 @ 4'	9/17/2020	4	---	378	---	0.0295	0.213	0.125	2.18	2.55	39.8	2,300	885	3,225
SB-9 @ 4'	9/17/2020	4	---	987	---	<0.0250	<0.0250	<0.0250	<0.0250	<0.0250	<20.0	<25.0	<50.0	<20.0
SB-10 @ 4'	9/17/2020	4	---	2,230	---	0.0299	<0.0250	<0.0250	<0.0250	0.0299	<20.0	<25.0	<50.0	<20.0
Background	9/17/2020	---	---	<20.0	---	---	---	---	---	---	---	---	---	---
WSP Soil Borings														
BH01@0-2.5'	10/19/2020	0 - 2.5	316	360	3.5	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.4	<47	<47
BH01@12.5-15'	10/19/2020	12.5 - 15	<120	<61	---	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.7	<49	<49
BH02@2.5-5'	10/19/2020	2.5 - 5	120	59	3.2	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.5	<47	<47
BH02@12.5-15'	10/19/2020	12.5 - 15	<120	<60	0.8	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.4	<47	<47
BH03@2.5-5'	10/19/2020	2.5 - 5	<120	60	1.7	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.3	<46	<46
BH03@12.5-15'	10/19/2020	12.5 - 15	<120	<59	0.8	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<0.095	<47	<47
BH04@7.5-10'	10/19/2020	7.5 - 10	<120	64	4.0	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.3	<46	<46
BH04@12.5-15'	10/19/2020	12.5 - 15	<120	<60	0.9	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49
BH05@2.5-5'	10/19/2020	2.5 - 5	<120	<60	5.1	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.0	<45	<45
BH05@12.5-15'	10/19/2020	12.5 - 15	<120	<59	1.3	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.8	<49	<49
BH06@2.5-5'	10/19/2020	2.5 - 5	<120	<60	33.4	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	<9.7	<48	<48
BH06@12.5-15'	10/19/2020	12.5 - 15	<120	<60	1.7	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.6	<48	<48
BH07@2.5-5'	10/20/2020	2.5 - 5	748	730	5.1	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.8	<49	<49
BH07@12.5-15'	10/20/2020	12.5 - 15	<120	400	2.8	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.6	<48	<48
BH08@0-2.5'	10/20/2020	0 - 2.5	<120	<60	1.8	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<10	<50	<50
BH08@12.5-15'	10/20/2020	12.5 - 15	<120	290	1.3	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.4	<47	<47
BH09@0-5'	10/20/2020	0 - 5'	<120	<49	0.8	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.9	<49	<49
BH09@12.5-15'	10/20/2020	12.5 - 15	<120	<60	1.6	<0.025	<0.049	<0.049	<0.099	<0.099	<4.9	<9.4	<47	<47
BH10@0-2.5'	10/20/2020	0 - 2.5	268	410	8.2	<0.023	<0.047	<0.047	<0.093	<0.093	<4.7	<9.8	<49	<49
BH10@12.5-15'	10/20/2020	12.5 - 15	<120	84	3.6	<0.024	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<49	<49
BH11@0-2.5'	10/20/2020	0 - 2.5	688	440	114.3	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	1,000	970	1,970
BH11@12.5-15'	10/20/2020	12.5 - 15	<120	500	12.3	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.5	<48	<48
BH12@0-2.5'	10/20/2020	0 - 2.5	120	280	315	<0.048	<0.096	<0.096	<0.19	<0.19	<9.6	230	200	430
BH12@2.5-5'	10/20/2020	2.5 - 5	1,740	1,400	244	0.053	<0.097	<0.097	0.28	0.333	11	28	<47	39
BH12@7.5-9'	10/20/2020	7.5 - 9	184	790	153	<0.024	<0.048	<0.048	<0.097	<0.097	<4.8	18	<50	18
BH13@0-2.5'	10/20/2020	0 - 2.5	<120	<60	2.3	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.4	<47	<47
BH13@2.5-5'	10/20/2020	2.5 - 5	<120	89	1.8	<0.024	<0.049	<0.049	<0.098	<0.098	<4.9	<9.9	<49	<49
BH14@2.5-5'	10/20/2020	2.5 - 5	---	<60	---	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.7	<48	<48

Notes:  
mg/kg - milligrams per kilograms  
DRO - diesel range organics  
GRO - gasoline range organics  
MRO - motor oil range organics  
NE - Not Established  
PID - photoionization detector  
TPH- total petroleum hydrocarbons  
-- - sample/measurement not collected  
< indicates result is less than the stated laboratory method practical quantitation limit  
**BOLD** indicates results exceed the higher of the background sample result or practical quantitation limit



Table 4

Well Pad Excavation Soil Analytical Results  
CHACO 2308 03L #404H  
San Juan County, New Mexico

Sample ID	Sample Date	Sample Depth (feet)	Chloride (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			600	10	50	NE	NE	NE	100
Excavation Floor Samples									
FS01	12/30/2020	4 - 6	420	<0.025	<0.099	<9.9	<5.0	<49	<49
FS02	12/30/2020	4 - 6	420	<0.025	<0.098	<9.3	<4.9	<47	<47
FS03	12/30/2020	8	680	<0.025	<0.099	<9.7	<5.0	<49	<49
FS03-B (1)	12/30/2020	12	570	<0.025	<0.10	<9.7	<5.1	<49	<49
FS04	12/30/2020	8	720	<0.025	<0.099	<9.0	<4.9	<45	<45
FS04-B (1)	12/30/2020	12	430	<0.025	<0.099	<9.9	<5.0	<49	<49
FS05	1/11/2021	4 - 8	550	<0.025	<0.10	<8.8	<5.0	<44	<44
FS06	1/11/2021	4 - 8	900	<0.022	<0.089	<9.1	<4.4	<45	<45
FS06-B (1)	1/14/2021	8 - 10	440	---	---	---	---	---	---
FS07	1/11/2021	4 - 6	560	<0.024	<0.098	<9.6	<4.9	<45	<45
FS08	1/11/2021	6 - 10	280	<0.026	<0.11	<9.5	<5.3	<48	<48
FS09	1/11/2021	6 - 10	480	<0.018	<0.073	<9.6	<3.6	<48	<48
FS10	1/11/2021	4 - 6	160	<0.020	<0.078	<9.9	<3.9	<49	<49
FS11	1/11/2021	6	480	<0.019	<0.076	22	<3.8	<45	22
FS12	1/21/2021	10	310	<0.025	<0.099	<9.9	<5.0	<49	<49
FS13	1/21/2021	10	82	<0.024	<0.098	<9.9	<4.9	<49	<49
FS14	1/21/2021	8	<60	<0.025	<0.098	<9.5	<4.9	<48	<48
FS15	1/11/2021	7	<60	<0.019	<0.077	<9.5	<3.9	<47	<47
FS16	1/21/2021	8	<60	<0.025	<0.099	<9.6	<4.9	<48	<48
FS17	1/21/2021	8	<60	<0.025	<0.10	<9.8	<5.0	<49	<49
FS18	1/21/2021	8	230	<0.025	<0.10	<9.4	<5.0	<47	<47
FS19	1/21/2021	6	84	<0.025	<0.099	<9.9	<5.0	<49	<49
FS20	1/21/2021	6	200	<0.024	<0.098	<9.9	<4.9	<50	<50
FS21	1/21/2021	8	<60	<0.025	<0.10	<9.6	<5.0	<48	<48
FS22	1/21/2021	8	<60	<0.025	<0.10	<9.3	<5.0	<46	<46
FS23	1/21/2021	8	<60	<0.025	<0.099	25	<5.0	<48	<48
FS24	1/21/2021	8	<60	<0.025	<0.098	<9.3	<4.9	<46	<46
FS25	2/2/2021	8	<60	<0.025	<0.10	<9.4	<5.0	<47	<47
FS26	2/2/2021	8	<60	<0.025	<0.10	<8.9	<5.0	<45	<45
FS27	2/2/2021	8	<60	<0.025	<0.10	<9.7	<5.0	<48	<48
FS28	2/2/2021	8	61	<0.025	<0.10	<8.5	<5.0	<42	<42
FS29	2/2/2021	8	84	<0.025	<0.10	<9.6	<5.0	<48	<48
FS30	2/2/2021	4	230	<0.025	<0.10	<10	<5.0	<51	<51
FS31	2/2/2021	8	220	<0.025	<0.10	39	<5.0	<48	39
FS32	2/2/2021	8 - 10	68	<0.025	<0.10	<9.8	<5.0	<49	<49
FS33	2/2/2021	4 - 6	<60	<0.025	<0.10	<8.8	<5.0	<44	<44
FS34	2/2/2021	4	78	<0.025	<0.10	<9.3	<5.0	<46	<46
FS35	2/2/2021	4	70	<0.025	<0.10	<9.0	<5.0	<45	<45
FS36	2/2/2021	4	75	<0.025	<0.10	<8.8	<5.0	<44	<44
FS37	2/2/2021	2	150	<0.025	<0.10	<9.3	<5.0	<46	<46
FS38	2/8/2021	4	69	<0.022	<0.088	<9.4	<4.4	<47	<47
FS39	2/8/2021	4	85	<0.018	<0.074	11	<3.7	<49	11
FS40	2/8/2021	4-6	150	<0.088	<0.035	110	<18	77	187
FS40-B (1)	2/11/2021	6-10	---	<0.091	<0.37	<10	<18	<50	<50
FS41	2/8/2021	4	<60	<0.021	<0.083	<8.8	<4.1	<44	<44
FS42	2/8/2021	3	70	<0.019	<0.076	<9.9	<3.8	<50	<50
FS43	2/8/2021	3	63	<0.018	<0.071	<9.5	<3.5	<48	<48
FS44	2/8/2021	4	88	<0.019	<0.075	<9.0	<3.7	<45	<45
FS45	2/18/2021	4	<60	<0.025	<0.099	<9.5	<4.9	<47	<47
FS46	2/18/2021	4	150	<0.024	<0.097	<9.4	<4.9	<47	<47



Table 4

Well Pad Excavation Soil Analytical Results  
CHACO 2308 03L #404H  
San Juan County, New Mexico

Sample ID	Sample Date	Sample Depth (feet)	Chloride (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)
<b>NMOC Table 1 Closure Criteria (NMAC 19.15.29)</b>			<b>600</b>	<b>10</b>	<b>50</b>	NE	NE	NE	<b>100</b>
<b>Excavation Sidewall Samples</b>									
SW01 (2)	12/30/2020	1-4	480	<0.025	<0.10	<9.3	<5.0	<46	<46
SW02 (2)	12/30/2020	1 - 6	490	<0.025	<0.098	<9.3	<4.9	<46	<46
SW03 (2)	12/30/2020	2 - 8	470	<0.025	<0.099	<9.5	<5.0	<47	<47
SW04	1/11/2021	1 - 6	77	<0.022	<0.089	<9.4	<4.5	<47	<47
SW05	Not Sampled	---	---	---	---	---	---	---	---
SW06	1/11/2021	1 - 5	<60	<0.017	<0.070	<9.1	<3.5	<45	<45
SW07	1/21/2021	1 - 6	<60	<0.025	<0.098	<9.6	<4.9	<48	<48
SW08	2/2/2021	0 - 8	96	<0.020	<0.078	<9.0	<3.9	<45	<45
SW09	2/2/2021	0 - 8	180	<0.021	<0.085	<9.3	<4.2	<47	<47
SW10	2/2/2021	2 - 8	120	<0.019	<0.075	<9.0	<3.7	<45	<45
SW11	2/2/2021	0 - 4	100	<0.019	<0.077	<9.7	<3.8	<48	<48
SW12	2/2/2021	0 - 4	65	<0.018	<0.072	<9.5	<3.6	<48	<48
SW13	2/2/2021	0 - 4	<60	<0.020	<0.081	<9.7	<4.0	<49	<49
SW14	2/8/2021	0 - 4	160	<0.020	<0.081	17	<4.1	<46	17
SW15	2/8/2021	0 - 4	140	<0.020	<0.078	<9.7	<3.9	<49	<49
SW16	2/8/2021	0 - 4	160	<0.021	<0.086	<8.8	<4.3	<44	<44
SW17	2/8/2021	0 - 4	76	<0.018	<0.070	<9.6	<3.5	<48	<48
SW18	2/8/2021	0 - 3	63	<0.018	<0.073	<9.2	<3.7	<46	<46
SW19	2/8/2021	0 - 3	140	<0.13	<0.50	220	<25	170	<b>390</b>
SW19-B (1)	2/11/2021	0 - 3	---	<0.018	<0.070	<8.9	<3.5	<44	<44
SW20	2/18/2021	0 - 3	84	<0.025	<0.099	<9.8	<5.0	<49	<49
SW21	2/18/2021	0 - 3	290	>0.024	<0.096	<9.9	<4.8	<50	<50

**Notes:**

- (1) - Soil was subsequently removed from this sampling area and resampled. Composite samples collected after additional soil removal are indicated with a "B".  
 (2) - Sample names mislabeled with "WS01", etc., on the chain-of-custody and laboratory reports.

mg/kg - milligrams per kilograms

DRO - diesel range organics

GRO - gasoline range organics

MRO - motor oil range organics

TPH- total petroleum hydrocarbons

NE - Not Established

-- - sample/measurement not collected

&lt; indicates result is less than the stated laboratory method practical quantitation limit

**BOLD** indicates results exceed the higher of the background sample result or practical quantitation limit



## ENCLOSURE A – PHOTOGRAPHIC LOG



**PHOTOGRAPHIC LOG****Whiptail Midstream and  
Enduring Resources****Chaco 2308 03L #404H  
SAN JUAN COUNTY, NEW MEXICO****TE077920011**

Photo No.	Date	
1	August 18, 2020	
Residual crude and produced water inside secondary containment. View looking south from southeast corner of secondary containment.		


Photo No.	Date	
2	August 18, 2020	
Release path to the south of the secondary containment. Crude/produced water migrated into the vegetation south of the well pad. View looking south from southwest corner of secondary containment.		





PHOTOGRAPHIC LOG		
Whiptail Midstream and Enduring Resources	Chaco 2308 03L #404H SAN JUAN COUNTY, NEW MEXICO	TE077920011

Photo No.	Date	
3	August 18, 2020	
Release path to the west of the secondary containment. Crude/produced water migrated into the well pad. View looking north from southwest corner of secondary containment.		

Photo No.	Date	
4	August 18, 2020	
Release path within Kimbeto Wash. Petroleum staining and chloride crusting from the produced water can be seen on the soil. View looking northeast.		





PHOTOGRAPHIC LOG		
Whiptail Midstream and Enduring Resources	Chaco 2308 03L #404H SAN JUAN COUNTY, NEW MEXICO	TE077920011

Photo No.	Date	
5	August 26, 2020	
Wash Area excavation inside the tributary wash. View looking northeast. View looking west at floor sampling area "Wash FS08".		

Photo No.	Date	
6	September 1, 2020	
View of the initial soil removal in the Southwest Area excavation. View looking southwest.		





PHOTOGRAPHIC LOG		
Whiptail Midstream and Enduring Resources	Chaco 2308 03L #404H SAN JUAN COUNTY, NEW MEXICO	TE077920011

Photo No.	Date	
7	January 6, 2021	
View of Pad Area excavation looking south at floor sampling areas "FS01 to FS12".		A wide-angle photograph of a large, deep excavation site. The ground is dark and uneven, with some lighter patches. In the background, there are hills and a power line tower. A bright light flare is visible in the upper right. An orange and white traffic cone is in the bottom right corner.

Photo No.	Date	
8	January 14, 2021	
View of Pad Area excavation looking southeast at floor sampling areas "FS19, FS20, and FS32".		A photograph of an excavation site with patches of snow on the ground. In the background, there are snow-covered mountains and a red excavator. A power line tower is also visible.





PHOTOGRAPHIC LOG		
Whiptail Midstream and Enduring Resources	Chaco 2308 03L #404H SAN JUAN COUNTY, NEW MEXICO	TE077920011

Photo No.	Date	
9	3/15/2021	
All remedial excavation areas were backfilled in February and March 2021. View of the reclaimed excavation near floor sampling area "Wash FS06" within Kimbeto Wash (looking east).		

Photo No.	Date	
10	3/15/2021	
View of backfilled Pad Area excavation near floor sampling areas "FS41, FS45, and FS46". View also includes the reclaimed Southwest Area excavation south of the well pad. The Southwest Area excavation was backfilled, recontoured, and reseeded once impacted soils were successfully removed. View looking southwest.		



ENCLOSURE B – NMOCD SAMPLING FREQUENCY VARIANCE  
APPROVALS



**From:** [Smith, Cory, EMNRD](#)  
**To:** [Hyde, Stuart](#); [Joyner, Ryan N](#)  
**Cc:** [Bobby McCracken](#); [Alex Campbell](#); [Ernie Johnson](#); [Herb, Brooke](#); [Kahn, Steve](#); [Douglas Elworthy](#); [Bill Sutton](#); [McGinn, Caitlin](#)  
**Subject:** RE: NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 8, 2021  
**Date:** Monday, February 8, 2021 2:15:24 PM  
**Attachments:** [image001.png](#)

---

Stuart,

OCD approves the 400 sqft sampling for 2/8/2021 sampling event.

Thank you for the photos and the site update.

**Cory Smith** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Hyde, Stuart <Stuart.Hyde@wsp.com>  
**Sent:** Monday, February 8, 2021 1:27 PM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Joyner, Ryan N <rjoyner@blm.gov>  
**Cc:** Bobby McCracken <BMcCracken@enduringresources.com>; Alex Campbell <ACampbell@enduringresources.com>; Ernie Johnson <ernie.johnson@whiptailmidstream.com>; Herb, Brooke <Brooke.Herb@wsp.com>; Kahn, Steve <Steve.Kahn@wsp.com>; Douglas Elworthy <DElworthy@enduringresources.com>; Bill Sutton <bill.sutton@rwmnc.net>; McGinn, Caitlin <Caitlin.McGinn@wsp.com>  
**Subject:** [EXT] RE: NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 8, 2021

Cory,

Please find attached photos from the excavation sampling areas today. Again, we are requesting a 400 square foot variance for sampling at the Site. This also should be the last sampling event, assuming we get favorable analytical results. Please call or email with any questions. Thanks much and talk to you soon.

**Stuart Hyde, L.G.**  
Environmental Geologist  
T+ 1 970-385-1096  
M+ 1 970-903-1607





**From:** Hyde, Stuart

**Sent:** Thursday, February 4, 2021 10:37 AM

**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Douglas Elworthy <[DElworthy@enduringresources.com](mailto:DElworthy@enduringresources.com)>; Bill Sutton <[bill.sutton@rwmnc.net](mailto:bill.sutton@rwmnc.net)>; Caitlin McGinn ([Caitlin.Mcginn@wsp.com](mailto:Caitlin.Mcginn@wsp.com)) <[Caitlin.Mcginn@wsp.com](mailto:Caitlin.Mcginn@wsp.com)>

**Subject:** NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 8, 2021

To whom it may concern:

On behalf of Enduring Resources and Whiptail Midstream, WSP is providing notice to perform the last round of confirmation soil sampling of the remedial excavation at the Chaco 2308 03L #404H Site, to be conducted on Monday February 8, 2021 at 12:00 p.m. The site is located at latitude 36.25506 and longitude -107.67775.

For this event, WSP is requesting a variance regarding the sampling frequency for confirmation floor and sidewall samples. Specifically, WSP is requesting that samples be collected at a frequency of one, 5-point composite sample for every 400 square feet within the excavation. To support this variance request, WSP will send photos and call Mr. Cory Smith while on-site on February 8, 2021. We understand that NMOCD approval of this variance will depend on site conditions at the time of sampling.

Please feel free to call or email with any questions or concerns. Thanks and have a great weekend.

**Stuart Hyde, L.G.**

Environmental Geologist

*Please note the new email address.*



T+ 1 970-385-1096

M+ 1 970-903-1607

Email : [stuart.hyde@wsp.com](mailto:stuart.hyde@wsp.com)

WSP USA

848 East 2<sup>nd</sup> Avenue

Durango, Colorado 81301

[wsp.com](http://wsp.com)

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-LAEmHhHzdJzBITWfa4Hgs7pbKI



**From:** [Smith, Cory, EMNRD](#)  
**To:** [Ernie Johnson](#)  
**Cc:** [Stuart Hyde](#); [Brooke Herb](#); [Adeloye, Abiodun A](#)  
**Subject:** RE: Sampling Variance Request - Chaco 2308 3L 405H  
**Date:** Monday, August 31, 2020 7:29:14 AM  
**Attachments:** [image002.png](#)  
[image003.png](#)  
[image004.png](#)

---

Ernie,

OCD approves the 400sqft sampling in the wash area south of the pad. Upon completion of the excavation in the other areas when further details are available OCD will make a determination on those areas.

Please include this approval in your Final C-141.

OCD approval of alternative sampling size does not relieve Whiptail of any other requirements imposed by other regulatory agencies.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Brooke Herb <bherb@ltenv.com>  
**Sent:** Friday, August 28, 2020 3:55 PM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Cc:** Ernie Johnson <ernie.johnson@whiptailmidstream.com>; Stuart Hyde <shyde@ltenv.com>  
**Subject:** [EXT] Sampling Variance Request - Chaco 2308 3L 405H

Cory,

LT Environmental, Inc. (LTE), on behalf of Whiptail Midstream (Whiptail), presents the following Sampling Variance Request sent via e-mail to propose alternative closure sampling to confirm the remediation of impacted soil at the Chaco 2308 3L 405H (Site) in the northwest quarter of the southwest quarter of Section 3, Township 23 North, Range 8 West, in San Juan County, New Mexico (Figure 1). The sampling described is designed to evaluate remediation progress and propose a variance to the New Mexico Oil Conservation Division (NMOCD) confirmation sampling requirements in 19.15.29.12.D(3) of the New Mexico Administrative Code (NMAC).

Whiptail has excavated approximately 875 cubic yards of impacted soil from a tributary to and within Kimbeto Wash. The excavation is approximately 800 feet long, and an average of 8 feet wide, and 4 feet deep. Whiptail is requesting a variance to the 200-square foot confirmation sampling



requirement for the area to be excavated, which would require an estimated 32 floor samples and 34 sidewall samples from the wash excavation. Due to the large size of the affected area, LTE proposes increasing the confirmation sampling size to a 400-square foot area and collecting a 5-point composite sample to represent each 400-square foot area. A 5-point composite sample would be collected approximately every 50 feet from the floor of the excavation (estimated 16 floor samples) and a 5-point composite sample would be collected approximately every 100 feet of the sidewalls (estimated 17 sidewall samples) to confirm remediation of any impacts within the release extent in the wash.

The total extent of the excavation in areas on the pad and to the southwest of the pad are unknown at this time; however, Whiptail requests additional samples be included in this variance and collected every 400-square feet to address the additional excavation areas. As of August 28, 2020, Whiptail has excavated approximately 1,050 cubic yards of soil from an area southwest of the pad. This excavation is not complete and will be extended vertically and horizontally. Based on field screening delineation, LTE estimates that at 200 ft<sup>2</sup> sampling grid we would have to sample approximately 50 floor samples and 20 sidewall samples.

Thank you,  
Brooke



Brooke Herb  
Project Geologist/ Four Corners Office Manager  
970.403.6824 *cell*  
970.385.1096 *direct*  
848 East Second Avenue Durango, CO 81301  
[www.ltenv.com](http://www.ltenv.com)



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**From:** [Smith, Cory, EMNRD](#)  
**To:** [Brooke Herb](#); [Adeloye, Abiodun A](#)  
**Cc:** [Stuart Hyde](#); [Ernie Johnson](#)  
**Subject:** RE: Sampling Notification - Chaco 2308 3L 405H  
**Date:** Wednesday, September 2, 2020 7:59:24 AM  
**Attachments:** [image012.png](#)  
[image013.png](#)  
[image014.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

---

Ernie,

OCD approves the alterative sampling time and size.

Please include this approval in your final C-141.

OCD approval does not relieve Whiptail of any other requirements imposed by other regulatory agencies.

Thank you,

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Brooke Herb <bherb@ltenv.com>  
**Sent:** Tuesday, September 1, 2020 2:08 PM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Adeloye, Abiodun A <aadeloye@blm.gov>  
**Cc:** Stuart Hyde <shyde@ltenv.com>; Ernie Johnson <ernie.johnson@whiptailmidstream.com>  
**Subject:** [EXT] RE: Sampling Notification - Chaco 2308 3L 405H

Cory,

LT Environmental intends to collect confirmation soil samples from the excavation to the southwest of the pad at the Chaco 2308 3L 405H on Thursday September 3, 2020 at 10 AM. Per our phone conversation, I appreciate you accepting a slight variance in the sampling notification timeframe. Additionally, we discussed a sampling variance to collect one 5-point composite sample per every 400 square feet.

Thank you,  
Brooke

Brooke Herb  
Project Geologist/ Four Corners Office Manager  
970.403.6824 cell





970.385.1096 direct  
848 East Second Avenue Durango, CO 81301  
[www.ltenv.com](http://www.ltenv.com)



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---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Monday, August 31, 2020 7:27 AM  
**To:** Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>  
**Cc:** Stuart Hyde <[shyde@ltenv.com](mailto:shyde@ltenv.com)>; Brooke Herb <[bherb@ltenv.com](mailto:bherb@ltenv.com)>; Adeloye, Abiodun A <[aadeloye@blm.gov](mailto:aadeloye@blm.gov)>  
**Subject:** RE: Sampling Variance Request - Chaco 2308 3L 405H

Ernie,

OCD approves the 400sqft sampling in the wash area south of the pad. Upon completion of the excavation in the other areas when further details are available OCD will make a determination on those areas.

Please include this approval in your Final C-141.

OCD approval of alternative sampling size does not relieve Whiptail of any other requirements imposed by other regulatory agencies.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Brooke Herb <[bherb@ltenv.com](mailto:bherb@ltenv.com)>  
**Sent:** Friday, August 28, 2020 3:55 PM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Cc:** Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Stuart Hyde <[shyde@ltenv.com](mailto:shyde@ltenv.com)>  
**Subject:** [EXT] Sampling Variance Request - Chaco 2308 3L 405H

Cory,



LT Environmental, Inc. (LTE), on behalf of Whiptail Midstream (Whiptail), presents the following Sampling Variance Request sent via e-mail to propose alternative closure sampling to confirm the remediation of impacted soil at the Chaco 2308 3L 405H (Site) in the northwest quarter of the southwest quarter of Section 3, Township 23 North, Range 8 West, in San Juan County, New Mexico (Figure 1). The sampling described is designed to evaluate remediation progress and propose a variance to the New Mexico Oil Conservation Division (NMOCD) confirmation sampling requirements in 19.15.29.12.D(3) of the New Mexico Administrative Code (NMAC).

Whiptail has excavated approximately 875 cubic yards of impacted soil from a tributary to and within Kimbeto Wash. The excavation is approximately 800 feet long, and an average of 8 feet wide, and 4 feet deep. Whiptail is requesting a variance to the 200-square foot confirmation sampling requirement for the area to be excavated, which would require an estimated 32 floor samples and 34 sidewall samples from the wash excavation. Due to the large size of the affected area, LTE proposes increasing the confirmation sampling size to a 400-square foot area and collecting a 5-point composite sample to represent each 400-square foot area. A 5-point composite sample would be collected approximately every 50 feet from the floor of the excavation (estimated 16 floor samples) and a 5-point composite sample would be collected approximately every 100 feet of the sidewalls (estimated 17 sidewall samples) to confirm remediation of any impacts within the release extent in the wash.

The total extent of the excavation in areas on the pad and to the southwest of the pad are unknown at this time; however, Whiptail requests additional samples be included in this variance and collected every 400-square feet to address the additional excavation areas. As of August 28, 2020, Whiptail has excavated approximately 1,050 cubic yards of soil from an area southwest of the pad. This excavation is not complete and will be extended vertically and horizontally. Based on field screening delineation, LTE estimates that at 200 ft<sup>2</sup> sampling grid we would have to sample approximately 50 floor samples and 20 sidewall samples.

Thank you,  
Brooke



Brooke Herb  
Project Geologist/ Four Corners Office Manager  
970.403.6824 *cell*  
970.385.1096 *direct*  
848 East Second Avenue Durango, CO 81301  
[www.ltenv.com](http://www.ltenv.com)



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**From:** [Hyde, Stuart](#)  
**To:** [Hyde, Stuart](#)  
**Subject:** FW: NRM 2023331895 Chaco 2308 03L #404H  
**Date:** Thursday, December 31, 2020 9:38:20 AM

---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Thursday, December 31, 2020 7:28 AM  
**To:** Carroll, Eric <[Eric.Carroll@wsp.com](mailto:Eric.Carroll@wsp.com)>  
**Cc:** Ernie Johnson ([ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com))  
<[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>  
**Subject:** RE: NRM 2023331895 Chaco 2308 03L #404H

Morning Eric,

I got a much of Mail Delivery system errors this morning from the email I sent back yesterday look like WSP system kicked back my response that had all the photos in it..

Anyways here is what I sent back for your records. I assume you all sampled yesterday and everything went well?

"Eric,

I am sooo sorry, I stepped out for lunch and was having some computer issues! If I recall the black soils were native to the area so everything looks good..

OCD approves the 400 sqft sampling area for todays sampling if there is any spots that out of the ordinary please make sure to collect a grab sample of that area or ensure that area is included in the sampling area.

Please include this approval in your final C-141. "

**Cory Smith** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

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**From:** [Smith, Cory, EMNRD](#)  
**To:** [Hyde, Stuart](#)  
**Cc:** [Kahn, Steve](#); [Herb, Brooke](#); [Bobby McCracken](#); [Alex Campbell](#); [Ernie Johnson](#); [McGinn, Caitlin](#); [Bill Sutton](#); [Douglas Elworthy](#)  
**Subject:** RE: NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling  
**Date:** Tuesday, January 19, 2021 3:18:19 PM  
**Attachments:** [image001.png](#)

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Stuart,

Thank you for the update. It is understandable to miss the variance approval for only that sampling event. Reviewing the pictures and site map the OCD approves the requested sampling size of 400sqft sampling area for FS04-FS11, FS15, SW04, and SW06

For tomorrows sampling event if you could give me some updated pictures of the area proposed to be sampled that day/tomorrow etc.

**Cory Smith** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Hyde, Stuart <Stuart.Hyde@wsp.com>  
**Sent:** Tuesday, January 19, 2021 8:13 AM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Cc:** Kahn, Steve <Steve.Kahn@wsp.com>; Herb, Brooke <Brooke.Herb@wsp.com>; Bobby McCracken <BMcCracken@enduringresources.com>; Alex Campbell <ACampbell@enduringresources.com>; Ernie Johnson <ernie.johnson@whiptailmidstream.com>; McGinn, Caitlin <Caitlin.McGinn@wsp.com>; Bill Sutton <bill.sutton@rwmnc.net>; Douglas Elworthy <DElworthy@enduringresources.com>  
**Subject:** [EXT] RE: NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling

Cory,

Please see the attached lab results, figure, and photos (see below bullets for details) from the Chaco excavation. The lab results are from the confirmation sampling on 12/30/2020 and 1/11/2021 (with one resample from 1/13/2021). The sampling on 12/30/2020 was approved for the 400 sq ft variance and we collected floor samples FS01 through FS04, and sidewalls SW01 to SW03. FS03 and FS04 contained chloride just above the closure criteria of 600, so we removed additional soil and resampled during the next sampling event on 1/11/2021. Those two areas subsequently passed, as shown on the attached table.

Looking back at your variance approval for the 12/30/2020 sampling, I now see that you had approved the variance for just that one event. That was my misunderstanding and I had interpreted it to be for the excavation moving forward. The second sampling event was on 1/11/2021



(notification sent to BLM and NMOCD on January 7th) and I had again assumed a 400 sq ft sampling grid and collected samples based on that frequency (samples FS04 through FS11, FS15, SW04, and SW06). The attached figure shows the excavation extent and sampling areas that have been field screened and sampled thus far. The attached photos were taken during the 1/11/2021 sampling event. Due to the misunderstanding and the laboratory results that are mostly nondetect for BTEX and TPH, is it possible to retroactively approve this sampling variance of 400 sq ft? The excavation is still open in these areas so we can call/facetime today/tomorrow if you would like to assess the area and the excavation.

In addition, several areas (FS12, FS13, FS14, FS15, FS17, and SW05) failed the field screening and additional soil is currently being removed (no lab samples were collected). We are planning to field screen these areas and any additional areas that have since been excavated on today or tomorrow, weather dependent. We can also discuss the 400 sq ft variance for any additional areas today.

I will give you a call today mid-morning to discuss. Please let me know if there is a time that works better for you.

#### Photo details

- Photo 1: southern excavation looking south at FS14 through FS16 and sidewall SW06
- Photo 7: northeast portion of excavation looking southeast at FS03, FS04, FS05, and FS06.
- Photo 8: north excavation looking southeast at FS05 through FS12

**Stuart Hyde, L.G.**

Environmental Geologist

T+ 1 970-385-1096

M+ 1 970-903-1607



---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>

**Sent:** Friday, January 15, 2021 10:21 AM

**To:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>; Enviro, OCD, EMNRD <[OCD.Enviro@state.nm.us](mailto:OCD.Enviro@state.nm.us)>;

Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Bill Sutton

<[bill.sutton@rwm-inc.net](mailto:bill.sutton@rwm-inc.net)>; Douglas Elworthy <[DElworthy@enduringresources.com](mailto:DElworthy@enduringresources.com)>; Kahn, Steve

<[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; McGinn, Caitlin

<[Caitlin.McGinn@wsp.com](mailto:Caitlin.McGinn@wsp.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Alex

Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>

**Subject:** RE: NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling

Stuart,

Thank you from the sampling notification for Wednesday January 20, 2021 at 12:00 p.m. As previously mentioned the Remediation plan has not been approved, please strike this statement



from any future notification so I don't have to keep addressing it.

Please Sample per 19.15.29 NMAC. Whiptail may request alternative sampling size via photos/facetime or if an OCD representative is onsite we can discuss it then.

Thank you,

**Cory Smith • Environmental Specialist**  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6178 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Sent:** Friday, January 15, 2021 10:01 AM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@state.nm.us](mailto:OCD.Enviro@state.nm.us)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Bill Sutton <[bill.sutton@rwmnc.net](mailto:bill.sutton@rwmnc.net)>; Douglas Elworthy <[DElworthy@enduringresources.com](mailto:DElworthy@enduringresources.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; McGinn, Caitlin <[Caitlin.McGinn@wsp.com](mailto:Caitlin.McGinn@wsp.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>  
**Subject:** [EXT] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling

To whom it may concern:

On behalf of Enduring Resources and Whiptail Midstream, WSP is providing notice to perform the third round of confirmation soil sampling of the remedial excavation at the Chaco 2308 03L #404H Site, to be conducted on Wednesday January 20, 2021 at 12:00 p.m.

The site is located at latitude 36.25506 and longitude -107.67775. Confirmation sampling will be performed in accordance with the *Site Characterization Report and Remediation Work Plan*, prepared by WSP and submitted to the NMOCD on November 13, 2020.

Please feel free to call or email with any questions or concerns. Thanks and have a great weekend.

**Stuart Hyde, L.G.**  
Environmental Geologist  
*Please note the new email address.*



T+ 1 970-385-1096  
M+ 1 970-903-1607  
Email : [stuart.hyde@wsp.com](mailto:stuart.hyde@wsp.com)



WSP USA  
848 East 2<sup>nd</sup> Avenue  
Durango, Colorado 81301

[wsp.com](http://wsp.com)

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-LAEmHhHzdJzBITWfa4Hgs7pbKI



**From:** [Cory, EMNRD](#)  
**To:** [Stuart Hyde](#)  
**Cc:** [Marian, L&E](#)  
**Subject:** RE: Chaco snow  
**Date:** Thursday, January 21, 2021 1:12:52 PM  
**Attachments:** [image001.png](#)

All,

Sorry for the delay I had to run to the office this morning. OCD approves the 400 Sft Sampling Variance for todays sampling.

Thank you for your cooperation's with pictures/email.

**Cory Smith • Environmental Specialist**  
Environmental Bureau  
EMNRD • Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6176 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnr.state.nm.us/OCD/>

**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Sent:** Thursday, January 21, 2021 10:07 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Cc:** McGinn, Caitlin <[Caitlin.McGinn@wsp.com](mailto:Caitlin.McGinn@wsp.com)>  
**Subject:** [EXT] RE: Chaco snow

Cory,

Attached are photos from the Chaco excavation this morning. Caitlin should be calling you directly to discuss the site. We are again requesting a 400 square foot variance for sampling frequency for this round of sampling. Please follow up with me if you have any additional questions after speaking with Caitlin.

Thanks much and talk to you soon.

Stuart Hyde, L.G.  
Environmental Geologist  
T: 1 970-385-1096  
M: 1 970-903-1807



**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Wednesday, January 20, 2021 9:29 AM  
**To:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Cc:** Ernie Johnson <[ernie.johnson@whipailmidstream.com](mailto:ernie.johnson@whipailmidstream.com)>; Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Bill Sutton <[bill.sutton@ryminc.net](mailto:bill.sutton@ryminc.net)>; Douglas Elworthy <[DElworthy@enduringresources.com](mailto:DElworthy@enduringresources.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Herb, Brooke <[Bbrooke.Herb@wsp.com](mailto:Bbrooke.Herb@wsp.com)>  
**Subject:** RE: Chaco snow

Stuart,

Sounds good to me, thanks for keeping me in the loop.

**Cory Smith • Environmental Specialist**  
Environmental Bureau  
EMNRD • Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6176 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnr.state.nm.us/OCD/>

**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Sent:** Wednesday, January 20, 2021 9:16 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Cc:** Ernie Johnson <[ernie.johnson@whipailmidstream.com](mailto:ernie.johnson@whipailmidstream.com)>; Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Bill Sutton <[bill.sutton@ryminc.net](mailto:bill.sutton@ryminc.net)>; Douglas Elworthy <[DElworthy@enduringresources.com](mailto:DElworthy@enduringresources.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Herb, Brooke <[Bbrooke.Herb@wsp.com](mailto:Bbrooke.Herb@wsp.com)>  
**Subject:** [EXT] Re: Chaco snow

Cory, thanks for your response. Talking with the contractor it sounds like the site is melting off pretty quick. We are planning to field screen today and, with your approval, push back the confirmation sampling to tomorrow, assuming the site is clear of snow and we can get good photos.

Please let me know if you have any objections. Thanks and have a good day.

Stuart Hyde, L.G.  
Environmental Geologist  
(970) 903-1807  
[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Wednesday, January 20, 2021 8:58:13 AM  
**To:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Cc:** Ernie Johnson <[ernie.johnson@whipailmidstream.com](mailto:ernie.johnson@whipailmidstream.com)>  
**Subject:** RE: Chaco snow

Stuart,

Reviewing the photo provide below and the other two you sent via text messages. I do not feel comfortable granting a 400 sqft variance because I cannot see the area to be sampled. I also cannot see if there is any wet or discolored areas that would require grab samples. Whiptail may continue on with 200 sqft sampling if this work must be done today while the site is covered in snow as that would be more protective of fresh water, human health and the environment. My recommendation would be to field screen and wait to collect confirmation samples.

Please let me know what you plan is.

**Cory Smith • Environmental Specialist**  
Environmental Bureau  
EMNRD • Oil Conservation Division  
1000 Rio Brazos | Aztec, NM 87410  
505.334.6176 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnr.state.nm.us/OCD/>

**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Sent:** Wednesday, January 20, 2021 8:31 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Subject:** [EXT] Chaco snow



**From:** [Smith, Cory, EMNRD](#)  
**To:** [Hyde, Stuart](#); [Joyner, Ryan N](#)  
**Cc:** [Bobby McCracken](#); [Alex Campbell](#); [Ernie Johnson](#); [Jesse Whitaker](#); [Herb, Brooke](#); [Kahn, Steve](#); [Bill Sutton](#)  
**Subject:** RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021  
**Date:** Friday, February 19, 2021 9:45:42 AM  
**Attachments:** [image001.png](#)

---

All,

OCD approves the sampling size request for todays sampling event

Thank you,

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Hyde, Stuart <Stuart.Hyde@wsp.com>  
**Sent:** Thursday, February 18, 2021 12:13 PM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Joyner, Ryan N <rjoyner@blm.gov>  
**Cc:** Bobby McCracken <BMcCracken@enduringresources.com>; Alex Campbell <ACampbell@enduringresources.com>; Ernie Johnson <ernie.johnson@whiptailmidstream.com>; Jesse Whitaker <jesse.whitaker@whiptailmidstream.com>; Herb, Brooke <Brooke.Herb@wsp.com>; Kahn, Steve <Steve.Kahn@wsp.com>; Bill Sutton <bill.sutton@rwminc.net>  
**Subject:** [EXT] RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

Cory,

Please see the attached figure and photos showing the site and sampling areas for today. The contractor waited until yesterday and this morning to excavate so that snow wouldn't cover the floor and sidewall areas that we wanted to sample.

Photo 1902 is the trench excavation between the on-pad excavation and the "SW Area" excavation located south of the well pad. You can see on the aerial image where the fluid ran off of the pad and this trench is removing that impacted soil.

On the figure, the "SW Area" excavation is shown south of the well pad and was previously excavated in August/September. At that time, all of the confirmation samples were below the Table I Closure Criteria except three sidewall areas located on the north sidewall (labeled SW01, SW03, and SW04). The contractor removed additional soil from the north sidewall and we are collecting new confirmation samples including seven floor samples (outlined in blue) and four sidewall samples



along the north sidewall. Photos 1903 and 1905 are taken from this area.

Again, we are requesting a variance to collect floor and sidewall confirmation samples at a frequency of one 5-point composite for every 400 square feet. Please let me know if you have any questions. Thanks much and talk to you soon.

**Stuart Hyde, L.G.**

Environmental Geologist

T+ 1 970-385-1096

M+ 1 970-903-1607



---

**From:** Hyde, Stuart

**Sent:** Wednesday, February 17, 2021 10:43 AM

**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwminc.net](mailto:bill.sutton@rwminc.net)>

**Subject:** RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

All,

After speaking to the contractor, we are needing to postpone the confirmation sampling once more and are planning to be onsite tomorrow, February 18. Sorry for all of the weather delays. Feel free to contact me with any questions. Thanks.

**Stuart Hyde, L.G.**

Environmental Geologist

T+ 1 970-385-1096

M+ 1 970-903-1607



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**From:** Hyde, Stuart

**Sent:** Monday, February 15, 2021 4:18 PM

**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwminc.net](mailto:bill.sutton@rwminc.net)>

**Subject:** RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

All,



We are postponing the confirmation sampling until Wednesday the 17<sup>th</sup> due to weather. We will keep you updated if anything changes. Thanks and call/email with any questions.

**Stuart Hyde, L.G.**

Environmental Geologist

T+ 1 970-385-1096

M+ 1 970-903-1607



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**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>

**Sent:** Friday, February 12, 2021 11:43 AM

**To:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwmnc.net](mailto:bill.sutton@rwmnc.net)>

**Subject:** RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

Stuart,

Thanks for the update please send the photos when your ready for review.

**Cory Smith • Environmental Specialist**

Environmental Bureau

EMNRD - Oil Conservation Division

1000 Rio Brazos | Aztec, NM 87410

505.334.6178 x115 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>

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**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>

**Sent:** Friday, February 12, 2021 10:13 AM

**To:** Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>

**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwmnc.net](mailto:bill.sutton@rwmnc.net)>

**Subject:** [EXT] RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

Will do, thank you Ryan.

**Stuart Hyde, L.G.**

Environmental Geologist



T+ 1 970-385-1096  
M+ 1 970-903-1607



---

**From:** Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Sent:** Friday, February 12, 2021 10:12 AM  
**To:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>; Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwminc.net](mailto:bill.sutton@rwminc.net)>  
**Subject:** RE: [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

Hi Stuart-

Thanks for the notification, BLM is fine with the updated sampling frequency. Please submit any pictures to the BLM as well.

Sincerely,

Ryan Joyner

---

**From:** Hyde, Stuart <[Stuart.Hyde@wsp.com](mailto:Stuart.Hyde@wsp.com)>  
**Sent:** Friday, February 12, 2021 9:32 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Joyner, Ryan N <[rjoyner@blm.gov](mailto:rjoyner@blm.gov)>  
**Cc:** Bobby McCracken <[BMcCracken@enduringresources.com](mailto:BMcCracken@enduringresources.com)>; Alex Campbell <[ACampbell@enduringresources.com](mailto:ACampbell@enduringresources.com)>; Ernie Johnson <[ernie.johnson@whiptailmidstream.com](mailto:ernie.johnson@whiptailmidstream.com)>; Jesse Whitaker <[jesse.whitaker@whiptailmidstream.com](mailto:jesse.whitaker@whiptailmidstream.com)>; Herb, Brooke <[Brooke.Herb@wsp.com](mailto:Brooke.Herb@wsp.com)>; Kahn, Steve <[Steve.Kahn@wsp.com](mailto:Steve.Kahn@wsp.com)>; Bill Sutton <[bill.sutton@rwminc.net](mailto:bill.sutton@rwminc.net)>  
**Subject:** [EXTERNAL] NRM202331895 - Chaco 2308 03L #404H - Notification for Excavation Confirmation Sampling on February 16, 2021

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

To whom it may concern:

On behalf of Enduring Resources and Whiptail Midstream, WSP is providing notice to perform



confirmation soil sampling of the remedial excavation at the Chaco 2308 03L #404H Site, to be conducted on Tuesday February 16, 2021 at 12:00 p.m. The site is located at latitude 36.25506 and longitude -107.67775.

For this event, WSP is requesting a variance regarding the sampling frequency for confirmation floor and sidewall samples. Specifically, WSP is requesting that samples be collected at a frequency of one, 5-point composite sample for every 400 square feet within the excavation. To support this variance request, WSP will send photos and call Mr. Cory Smith while on-site on February 16, 2021. We understand that NMOCD approval of this variance will depend on site conditions at the time of sampling.

Please feel free to call or email with any questions or concerns. Thanks and have a great weekend.

**Stuart Hyde, L.G.**

Environmental Geologist

*Please note the new email address.*



T+ 1 970-385-1096

M+ 1 970-903-1607

Email : [stuart.hyde@wsp.com](mailto:stuart.hyde@wsp.com)

WSP USA

848 East 2<sup>nd</sup> Avenue

Durango, Colorado 81301

[wsp.com](http://wsp.com)

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## ENCLOSURE C – WCRM ARCHAEOLOGICAL EMERGENCY SURVEY





November 5, 2020

Mr. Ernie Johnson  
Whiptail Midstream  
15 W. 6<sup>th</sup> Street, Suite 2901  
Tulsa, OK. 74119

Dear Ernie:

As requested, the client copy of our report on the archaeological survey of the proposed *Archaeological Emergency Survey for the Cleanup of Whiptail Midstream Chaco 2308 3L 405H Oil Pipeline Release, San Juan County, New Mexico*, has been submitted electronically to you. During the survey, no cultural material was encountered.

WCRM recommends the project be allowed to proceed. The agency copies of the report have been submitted to the Bureau of Land Management, Farmington Field Office, who will review this report and make the final decision on archaeological approval for your project.

Please contact us if you have any questions concerning the report.

Sincerely,

A handwritten signature in blue ink that reads "Deborah V. Gibson".

Deborah V. Gibson  
Project Manager

enc.

cc: Eric Simpson, BLM  
Brooke Herb, LTE (electronic only)  
Tom Lennon, WCRM



## NMCRI INVESTIGATION ABSTRACT FORM (NIAF)

<b>1. NMCRI Activity No.:</b> 146560	<b>2a. Lead (Sponsoring) Agency:</b> Bureau of Land Management - Farmington Field Office	<b>2b. Other Permitting Agency(ies):</b>	<b>3. Lead Agency Report No.:</b>									
<b>4. Title of Report:</b> Archaeological Emergency Survey for the Cleanup of Whiptail Midstream Chaco 2308 3L 405H Oil Pipeline Release, San Juan County, New Mexico  <b>Authors:</b> Michael J. Proper and Deborah V. Gibson			<b>5. Type of Report</b> <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive									
<b>6. Investigation Type</b>  <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> Research Design</div> <div style="width: 50%;"><input checked="" type="checkbox"/> Survey/Inventory</div> <div style="width: 50%;"><input type="checkbox"/> Test Excavation</div> <div style="width: 50%;"><input type="checkbox"/> Excavation</div> <div style="width: 50%;"><input type="checkbox"/> Collections/Non-Field Study</div> <div style="width: 50%;"><input type="checkbox"/> Overview/Lit Review</div> <div style="width: 50%;"><input type="checkbox"/> Monitoring</div> <div style="width: 50%;"><input type="checkbox"/> Ethnographic study</div> <div style="width: 50%;"><input type="checkbox"/> Site specific visit</div> <div style="width: 50%;"><input type="checkbox"/> Other</div> </div>												
<b>7. Description of Undertaking (what does the project entail?):</b> Greg Riley of Whiptail Midstream, LLC (Whiptail) contacted personnel from Western Cultural Resource Management, Inc. (WCRM) to conduct an emergency survey of an oil spill that occurred on the Chaco 2308 3L 405H well pad. Bureau of Land Management - Farmington Field Office (BLM-FFO) verbal stipulations were to survey the affected area for cultural resources and monitor the initial cleanup activities if cultural resources were discovered (Erik Simpson, personal communication, August 18, 2020). The area directly affected was defined as the spill area. In addition to the spill area a cultural buffer was surveyed around the entire spill area (i.e., 7.09 acres). No cultural resources were located during the two surveys conducted on August 19 <sup>th</sup> and 28 <sup>th</sup> that inventoried the project area; therefore, the cleanup operations were not monitored.			<b>8. Dates of Investigation:</b> August 19, 2020  <b>9. Report Date:</b> November 4, 2020									
<b>10. Performing Agency/Consultant:</b> Western Cultural Resource Management, Inc. <b>Principal Investigator:</b> Deborah V. Gibson, Project Director <b>Field Supervisor:</b> Michael J. Proper <b>Field Personnel Names:</b> Michael J. Proper			<b>11. Performing Agency/Consultant Report No.:</b> WCRM(F)1576 <b>Project No.:</b> 20F025  <b>12. Applicable Cultural Resource Permit No(s):</b> 25-2920-18-SS									
<b>13. Client/Customer (project proponent):</b> Whiptail Midstream, LLC <b>Contact:</b> Ernie Johnson <b>Address:</b> 15 W. 6 <sup>th</sup> Street, Suite 2901, Tulsa, OK 74119 <b>Phone:</b> (918) 289-2147			<b>14. Client/Customer Project No.:</b>									
<b>15. Land Ownership Status (<u>Must</u> be indicated on project map):</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Land Owner</th> <th style="text-align: center;">Acres Surveyed*</th> <th style="text-align: center;">Acres in APE</th> </tr> </thead> <tbody> <tr> <td>BLM-FFO</td> <td style="text-align: center;">7.09</td> <td style="text-align: center;">1.74</td> </tr> <tr> <td style="text-align: right;"><b>TOTALS</b></td> <td style="text-align: center;"><b>7.09</b></td> <td style="text-align: center;"><b>1.74</b></td> </tr> </tbody> </table> <p>*as calculated in ArcGIS</p>				Land Owner	Acres Surveyed*	Acres in APE	BLM-FFO	7.09	1.74	<b>TOTALS</b>	<b>7.09</b>	<b>1.74</b>
Land Owner	Acres Surveyed*	Acres in APE										
BLM-FFO	7.09	1.74										
<b>TOTALS</b>	<b>7.09</b>	<b>1.74</b>										
<b>16. Records Search(es):</b> A literature review was conducted prior to the emergency cultural resource inventory, see table below. There are 22 previously recorded sites are located within 1.0 mi of the project area [see Appendix A (for agency use only)]. No sites within 1.0 mi of the project area are listed on the National Register of Historic Places (NRHP) or New Mexico State Register of Cultural Properties (SRCP). Nineteen previous surveys were conducted between 1980 and 2017 within 0.25 mi of the project area [see Appendix B (for agency use only)]. Two surveys intersect the current project NMCRI 130066 (performed by Cindy Bunker of WCRM) and NMCRI 124773 (performed by La Plata Archaeological Consultants) (Bunker 2014; Fuller 2012). The 2014 survey was performed by WCRM for the LOGOS Resources Proposed Heros 003H Well Pad which later became the Enduring Resources Chaco 2308 3L 405H well pad. The BLM-FFO designated Lybrook Fossil Area of Critical Environmental Concern (ACEC) is located 0.3 miles south of the project area. According to Van Valkenburgh (1974), no place sacred to the Navajo is located in the vicinity of the project area. Searches of the online BLM General Land Office (GLO) patent records and cadastral survey plat maps were conducted on August 30, 2020 by Michael Proper [see Appendix C (for agency use only)]. The GLO records were used to determine whether lands within the cleanup project area are associated with events that have made a significant contribution to the broad patterns of our history (NRHP Criterion <i>a</i> ) and/or were associated with the lives of significant persons in our past (NRHP Criterion <i>b</i> ). In addition, the GLO cadastral survey plat maps were examined for features that may be of historical significance; no military patents or historic features, including roads, were present within the project area on the 1882 maps (USDOI, BLM 1882) or the 1950 map (USDOI, BLM 1950).  Bunker, Cindy J. 2014 <i>A Cultural Resource Survey of LOGOS Resources Proposed Heros 003H Well Pad, Access Road, and Pipeline, San Juan County, New Mexico.</i> Report No. WCRM(F)1287. Western Cultural Resource Management Inc., Farmington, New Mexico. (NMCRI 130066)  Fuller, Steven 2012a <i>A Cultural Resources Survey of WPX Energy Production LLC's Lybrook 23-8-4 Number 102H Well Pad and Access Road, San Juan County, New Mexico.</i> Report No. LAC 2012-29f. La Plata Archaeological Consultants, Dolores, Colorado. (NMCRI No. 124773)												



**16. Records Search(es) (continued):**

United States Department of Interior, Bureau of Land Management (USDOI, BLM)

1882 Plat Map for Township 23 North, Range 8 West, New Mexico Meridian. Electronic document, General Land Office Online Records Automation Website, [www.glorerecords.blm.gov](http://www.glorerecords.blm.gov), accessed August 30, 2020.1950 Plat Map for Township 23 North, Range 8 West, New Mexico Meridian. Electronic document, General Land Office Online Records Automation Website, [www.glorerecords.blm.gov](http://www.glorerecords.blm.gov), accessed August 30, 2020.

Van Valkenburgh, Richard F.

1974 *Navajo Sacred Places and A Short History of the Navajo People*. Garland American Indian Ethnohistory Series, Navajo Indians, 3 Vols. Garland Publishing, Inc., New York and London.

<b>Date(s) of ARMS File Review:</b> 8/19/2020	<b>Name of Reviewer:</b> Bob Estes	
<b>Date(s) of NR/SR File Review:</b> 8/20/2020	<b>Name of Reviewer:</b> Michael J. Proper	
<b>Date(s) of Other Agency File Review:</b> 8/18/2008	<b>Name of Reviewer:</b> Deborah V. Gibson	<b>Agency:</b> Bureau of Land Management - Farmington Field Office

**17. Survey Data:****a. Source Graphics**☐ NAD 27 ☒ NAD 83☒ USGS 7.5' (1:24,000) topo map☐ Other topo map, Scale:☒ GPS Unit Accuracy ☐ <1.0m ☒ 1-10m ☐ 10-100m ☐ >100m**b. USGS 7.5' Topographic Map Name****USGS Quad Code**

Crow Mesa West, NM 1985 (provisional edition)	36107-C6

**c. County:** San Juan**d. Nearest City or Town:** Nageezi, New Mexico**e. Legal Description:**

Township (N/S)	Range (E/W)	Section	1/4	1/4	1/4
23N	8W	3*	W1/2, NW1/4, SW1/4.		
23N	8W	4*	SE1/4, NE1/4, SE1/4		

\* template anchored on SE corner and southern section line

Projected legal description? Yes [ ] , No [ X ] Unplatted [ ]

**f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):** N/A**18. Survey Field Methods:**Intensity: ☒ 100% coverage ☐ <100% coverageConfiguration: ☐ block survey units ☒ linear survey units (l x w): ☐ other survey units (specify):Scope: ☒ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)Coverage Method: ☒ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): 15 Crew Size: 2 Fieldwork Dates: August 19 and 28, 2020

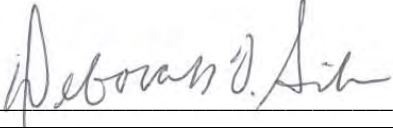
Survey Person Hours: 17 Recording Person Hours: 0 Total Hours: 17

**Additional Narrative:** On August 18, 2020, WCRM was notified of an accident resulting in an oil spill at the Chaco 2308 3L 405H well pad. The spill was limited to a tributary drainage channel of Kimbeto Wash (Spill A and AA), the constructed well pad (Spill B), and a proposed temporary access road to be developed in order to access the spill (Spill A and AA) and remove the contaminated sediment. The newly proposed access road corridor measures approximately 400 by 50 ft, and is entirely within the drainage bottom; it begins where the drainage crosses the original well pad access road. Using the temporary access road, the spill could then be accessed by mechanical equipment and the contaminated sediment was removed.

The total area surveyed was 7.09 acres. An initial survey of 6.72 acres (Spill A, AA, B) was performed by WCRM archaeologist Michael J. Proper on August 19, 2020 under hazy skies (smoke is from fires in Colorado) with hot temperatures; parallel transects were walked 15 m (i.e., 50 ft) apart. A cultural buffer zone was surveyed 100 ft around the affected area except in areas where previous survey had been recently completed (see NMCRIS 130066). The survey covered the proposed temporary access road, the drainage channel, and the well pad. During quality control testing of the soils in and around the spill, it was determined that additional acreage need to be decontaminated. On August 28, 2020, Whiptail requested that WCRM return to the spill area to inspect an additional 0.37 acres to ensure that all contaminated locations had been surveyed before final cleanup procedures commenced; the survey was conducted that day by Deborah Gibson and Leta Yazzie. Survey was performed on a clear sky, with moderate temperatures. During both surveys, relevant points were recorded in the field using a handheld GPS unit accurate to 1 m.

**19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):** The project area is located in the badlands around Kimbeto Wash, north of Highway 550. Elevations range from 6860 to 6900 ft. Sediment is tan sandy loam and outcrops of clay, shale, and sandstone bedrock. Vegetation in the project area consists of a spare understory of sagebrush, grama grass, rabbitbrush, snakeweed, greasewood, Russian thistle, four-wing saltbush, and prickly pear cactus.



<b>20.a. Percent Ground Visibility:</b> 80-100 <b>b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):</b> Energy development, livestock grazing, and recreation are activities currently taking place in the project area.	
<b>21. CULTURAL RESOURCE FINDINGS</b> <input type="checkbox"/> Yes, See Page 3 <input checked="" type="checkbox"/> No, Discuss Why: No cultural resources were located.	
<b>22. Required Attachments (check all appropriate boxes):</b> <input checked="" type="checkbox"/> USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn <input checked="" type="checkbox"/> Copy of NMCRIS Mapserver Map Check <input type="checkbox"/> LA Site Forms - new sites ( <i>with sketch map &amp; topographic map</i> ) <input type="checkbox"/> LA Site Forms (update) - previously recorded & un-relocated sites ( <i>first 2 pages minimum</i> ) <input type="checkbox"/> Historic Cultural Property Inventory Forms <input type="checkbox"/> List and Description of isolates, if applicable (see p. 3) <input type="checkbox"/> List and Description of Collections, if applicable	<b>23. Other Attachments:</b> <input type="checkbox"/> Photographs and Log <input type="checkbox"/> Other Attachments (Describe):
<b>24. I certify the information provided above is correct and accurate and meets all applicable agency standards.</b>  <b>Principal Investigator/Responsible Archaeologist:</b> Deborah V. Gibson  <div style="display: flex; justify-content: space-between;"> <div> <b>Signature</b>  </div> <div> <b>Date</b> <u>11/5/2020</u> </div> <div> <b>Title (if not PI):</b> Project Director         </div> </div>	
<b>25. Reviewing Agency:</b> <b>Reviewer's Name/Date</b>  Accepted (    )      Rejected (    )  Tribal Consultation (if applicable): <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>26. SHPO</b> <b>Reviewer's Name/Date:</b>  HPD Log #: SHPO File Location: Date sent to ARMS:



**CULTURAL RESOURCE FINDINGS***[fill in appropriate section(s)]*

<b>1. NMCRIS Activity No.:</b> 146560	<b>2. Lead (Sponsoring) Agency:</b> Bureau of Land Management, Farmington Field Office	<b>3. Lead Agency Report No.:</b>
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**SURVEY RESULTS:** No cultural resources were located during survey.

**Sites discovered and registered:** 0  
**Sites discovered and NOT registered:** 0  
**Previously recorded sites revisited** (*site update form required*): 0  
**Previously recorded sites not relocated** (*site update form required*): 0  
**TOTAL SITES VISITED:** 0  
**Total isolates recorded:** 0      **Non-selective isolate recording?** ☐  
**Total structures recorded** (*new and previously recorded, including acequias*): 0

**MANAGEMENT SUMMARY:** Since no historic properties were present within the spill project area, no further work is recommended and the undertaking should be allowed to proceed.

**IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.**

**SURVEY LA NUMBER LOG**

**Sites Discovered:**

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

**Previously recorded revisited sites:**

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)

**MONITORING LA NUMBER LOG** (*site form required*)

**Sites Discovered** (*site form required*) :      **Previously recorded sites** (*Site update form required*):

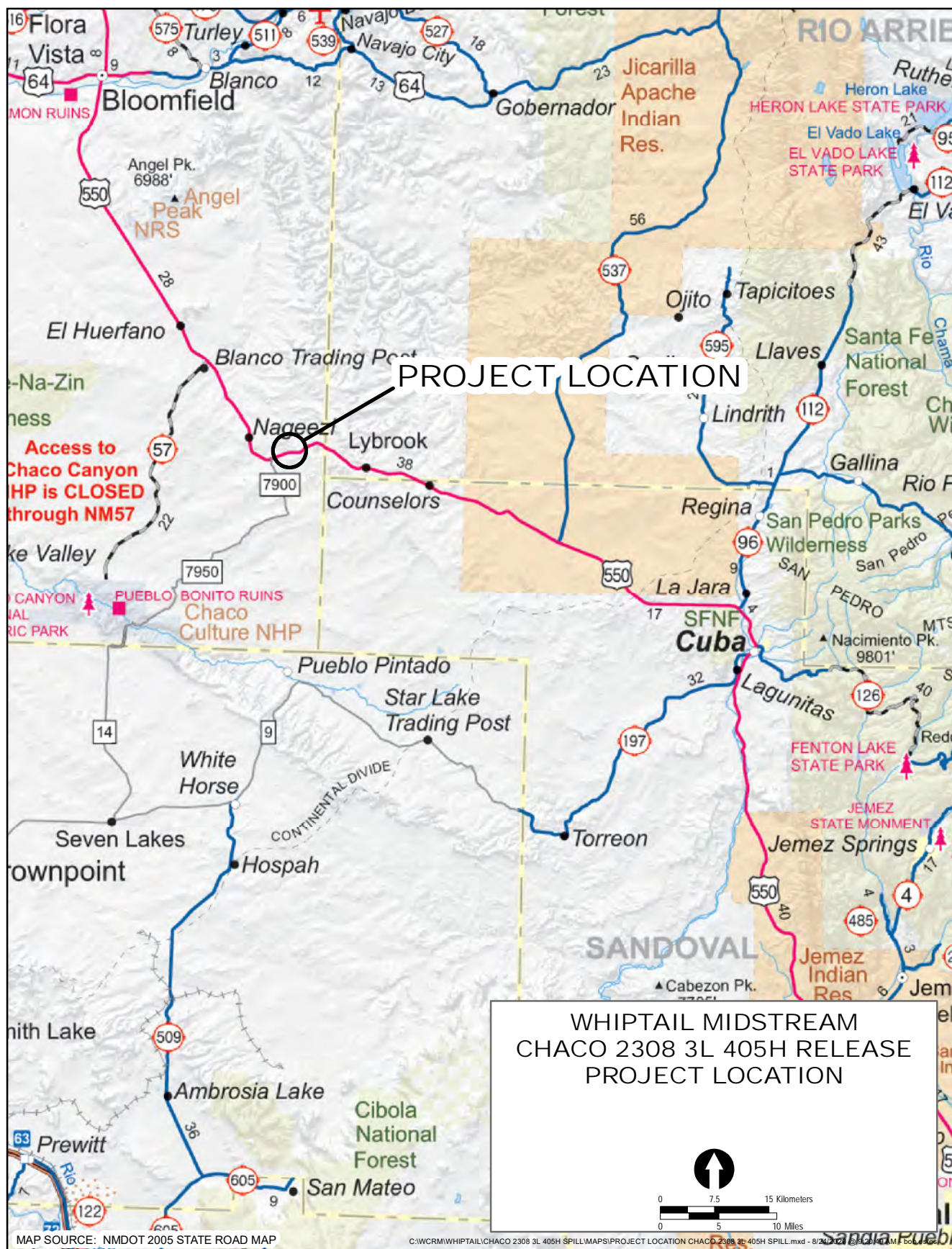
LA No.	Field/Agency No.	LA No.	Field/Agency No.

**Areas outside known nearby site boundaries monitored?** Yes ☐, No ☐ If no explain why:

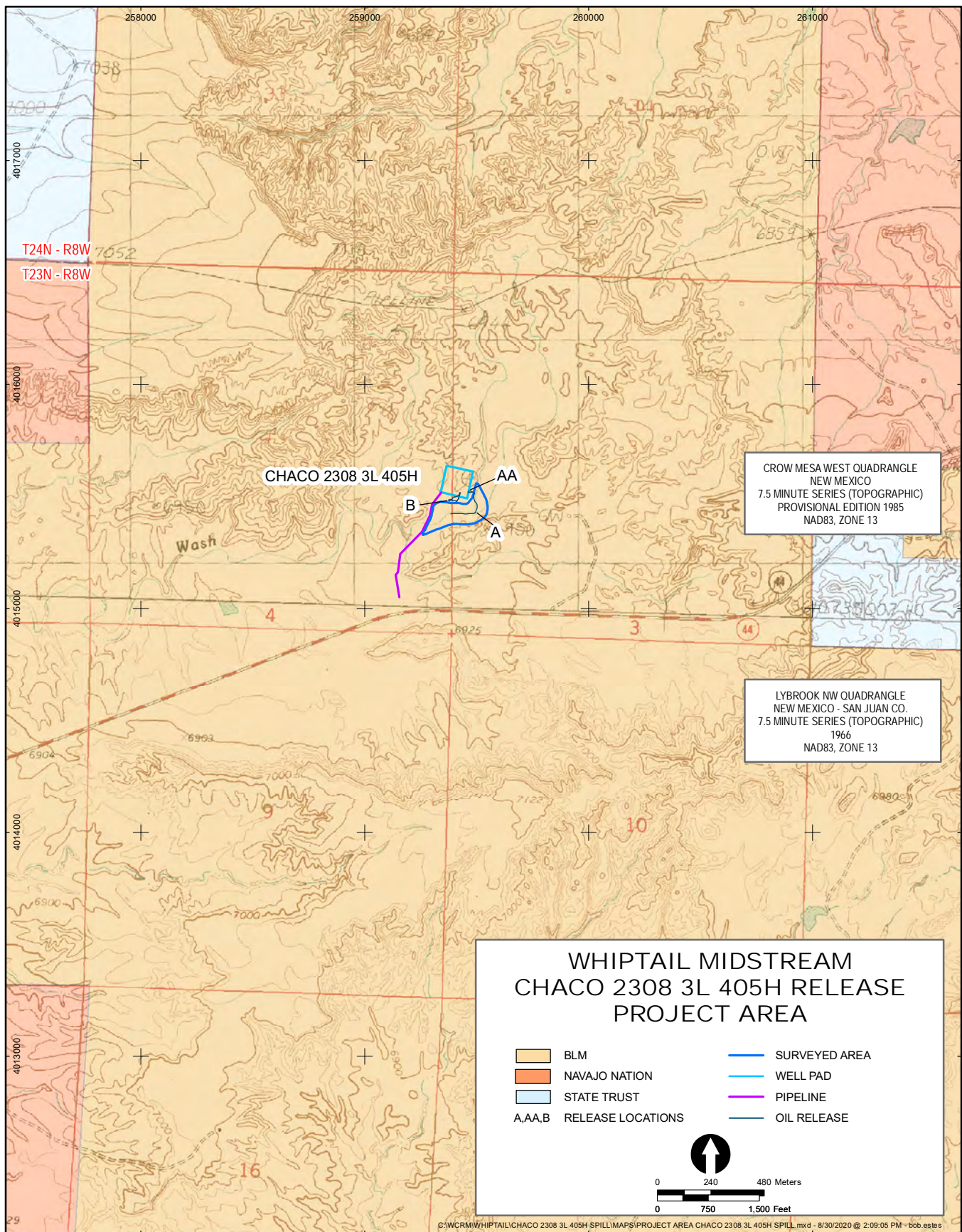
**TESTING & EXCAVATION LA NUMBER LOG** (*site form required*)

Tested LA number(s)	Excavated LA number(s)











## **Appendix A**

Previously Recorded Sites within 1.0 Mile of the Spill Project Area and Cultural Buffer Zone  
(for agency use only)



## **Appendix B**

Previous Surveys conducted within 0.25 Mile of the Spill Project Area and Cultural Buffer Zone  
(for agency use only)



## **Appendix C**

Historic GLO maps of the Spill Project Area and Cultural Buffer Zone  
(for agency use only)



ENCLOSURE D – REMEDIAL EXCAVATION SOIL ANALYTICAL  
LABORATORY REPORTS





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

January 06, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX

RE: Chaco 404H

OrderNo.: 2012D20

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/31/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS01

Project: Chaco 404H

Collection Date: 12/30/2020 1:00:00 PM

Lab ID: 2012D20-001

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	420	60		mg/Kg	20	1/4/2021 8:20:54 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/5/2021 9:10:27 AM	57320
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2021 9:10:27 AM	57320
Surr: DNOP	96.3	30.4-154		%Rec	1	1/5/2021 9:10:27 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/4/2021 10:00:30 AM	57303
Surr: BFB	91.9	75.3-105		%Rec	1	1/4/2021 10:00:30 AM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 10:00:30 AM	57303
Toluene	ND	0.050		mg/Kg	1	1/4/2021 10:00:30 AM	57303
Ethylbenzene	ND	0.050		mg/Kg	1	1/4/2021 10:00:30 AM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 10:00:30 AM	57303
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	1/4/2021 10:00:30 AM	57303

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

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

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## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS02

Project: Chaco 404H

Collection Date: 12/30/2020 1:05:00 PM

Lab ID: 2012D20-002

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	420	60		mg/Kg	20	1/4/2021 8:33:19 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/5/2021 9:34:36 AM	57320
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/5/2021 9:34:36 AM	57320
Surr: DNOP	85.9	30.4-154		%Rec	1	1/5/2021 9:34:36 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 11:11:04 AM	57303
Surr: BFB	92.4	75.3-105		%Rec	1	1/4/2021 11:11:04 AM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 11:11:04 AM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 11:11:04 AM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 11:11:04 AM	57303
Xylenes, Total	ND	0.098		mg/Kg	1	1/4/2021 11:11:04 AM	57303
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	1/4/2021 11:11:04 AM	57303

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

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

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## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS03

Project: Chaco 404H

Collection Date: 12/30/2020 1:10:00 PM

Lab ID: 2012D20-003

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	680	60		mg/Kg	20	1/4/2021 8:45:43 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/5/2021 9:58:36 AM	57320
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/5/2021 9:58:36 AM	57320
Surr: DNOP	102	30.4-154		%Rec	1	1/5/2021 9:58:36 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/4/2021 12:22:06 PM	57303
Surr: BFB	97.5	75.3-105		%Rec	1	1/4/2021 12:22:06 PM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 12:22:06 PM	57303
Toluene	ND	0.050		mg/Kg	1	1/4/2021 12:22:06 PM	57303
Ethylbenzene	ND	0.050		mg/Kg	1	1/4/2021 12:22:06 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 12:22:06 PM	57303
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/4/2021 12:22:06 PM	57303

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

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



## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS04

Project: Chaco 404H

Collection Date: 12/30/2020 1:15:00 PM

Lab ID: 2012D20-004

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	720	60		mg/Kg	20	1/4/2021 8:58:08 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/5/2021 8:27:24 AM	57320
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/5/2021 8:27:24 AM	57320
Surr: DNOP	94.8	30.4-154		%Rec	1	1/5/2021 8:27:24 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 12:46:00 PM	57303
Surr: BFB	96.3	75.3-105		%Rec	1	1/4/2021 12:46:00 PM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 12:46:00 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 12:46:00 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 12:46:00 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 12:46:00 PM	57303
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/4/2021 12:46:00 PM	57303

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

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

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## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: WS01

Project: Chaco 404H

Collection Date: 12/30/2020 1:20:00 PM

Lab ID: 2012D20-005

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	480	60		mg/Kg	20	1/4/2021 9:35:21 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/5/2021 8:51:02 AM	57320
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/5/2021 8:51:02 AM	57320
Surr: DNOP	77.9	30.4-154		%Rec	1	1/5/2021 8:51:02 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/4/2021 1:09:52 PM	57303
Surr: BFB	96.3	75.3-105		%Rec	1	1/4/2021 1:09:52 PM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 1:09:52 PM	57303
Toluene	ND	0.050		mg/Kg	1	1/4/2021 1:09:52 PM	57303
Ethylbenzene	ND	0.050		mg/Kg	1	1/4/2021 1:09:52 PM	57303
Xylenes, Total	ND	0.10		mg/Kg	1	1/4/2021 1:09:52 PM	57303
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	1/4/2021 1:09:52 PM	57303

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

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



## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: WS02

Project: Chaco 404H

Collection Date: 12/30/2020 1:25:00 PM

Lab ID: 2012D20-006

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	490	59		mg/Kg	20	1/4/2021 9:47:45 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/5/2021 9:14:38 AM	57320
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/5/2021 9:14:38 AM	57320
Surr: DNOP	96.4	30.4-154		%Rec	1	1/5/2021 9:14:38 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/4/2021 1:33:47 PM	57303
Surr: BFB	97.7	75.3-105		%Rec	1	1/4/2021 1:33:47 PM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 1:33:47 PM	57303
Toluene	ND	0.049		mg/Kg	1	1/4/2021 1:33:47 PM	57303
Ethylbenzene	ND	0.049		mg/Kg	1	1/4/2021 1:33:47 PM	57303
Xylenes, Total	ND	0.098		mg/Kg	1	1/4/2021 1:33:47 PM	57303
Surr: 4-Bromofluorobenzene	114	80-120		%Rec	1	1/4/2021 1:33:47 PM	57303

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

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

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## Analytical Report

Lab Order 2012D20

Date Reported: 1/6/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: WS03

Project: Chaco 404H

Collection Date: 12/30/2020 1:30:00 PM

Lab ID: 2012D20-007

Matrix: SOIL

Received Date: 12/31/2020 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	470	60		mg/Kg	20	1/4/2021 10:00:10 PM	57323
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/5/2021 9:38:17 AM	57320
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/5/2021 9:38:17 AM	57320
Surr: DNOP	99.1	30.4-154		%Rec	1	1/5/2021 9:38:17 AM	57320
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/4/2021 1:57:47 PM	57303
Surr: BFB	96.6	75.3-105		%Rec	1	1/4/2021 1:57:47 PM	57303
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/4/2021 1:57:47 PM	57303
Toluene	ND	0.050		mg/Kg	1	1/4/2021 1:57:47 PM	57303
Ethylbenzene	ND	0.050		mg/Kg	1	1/4/2021 1:57:47 PM	57303
Xylenes, Total	ND	0.099		mg/Kg	1	1/4/2021 1:57:47 PM	57303
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	1/4/2021 1:57:47 PM	57303

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

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

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

WO#: 2012D20

06-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>MB-57323</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57323</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625492</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57323</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57323</b>	RunNo: <b>74375</b>								
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625493</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

**Qualifiers:**

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

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

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

WO#: 2012D20

06-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>LCS-57320</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>57320</b>			RunNo: <b>74381</b>						
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/5/2021</b>			SeqNo: <b>2625833</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.5	68.9	141			
Surr: DNOP	4.4		5.000		88.6	30.4	154			

Sample ID: <b>MB-57320</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>57320</b>			RunNo: <b>74381</b>						
Prep Date: <b>1/4/2021</b>	Analysis Date: <b>1/5/2021</b>			SeqNo: <b>2625834</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		98.7	30.4	154			

**Qualifiers:**

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

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



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

WO#: 2012D20

06-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb-57303</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625528</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.3	75.3	105			

Sample ID: <b>lcs-57303</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625529</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.7	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

Sample ID: <b>2012d20-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS02</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625532</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.68	0	92.8	61.3	114			
Surr: BFB	1000		987.2		105	75.3	105			

Sample ID: <b>2012d20-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS02</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625533</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.53	0	95.5	61.3	114	2.26	20	
Surr: BFB	1000		981.4		107	75.3	105	0	0	S

**Qualifiers:**

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

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



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

WO#: 2012D20

06-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb-57303</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625560</b> Units: <b>mg/Kg</b>								
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	1.1		1.000		113	80	120			

Sample ID: <b>LCS-57303</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625561</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.2	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	80	120			

Sample ID: <b>2012d20-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS01</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625563</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	0.9921	0	88.6	76.3	120			
Toluene	0.92	0.050	0.9921	0	93.0	78.5	120			
Ethylbenzene	0.94	0.050	0.9921	0	94.5	78.1	124			
Xylenes, Total	2.9	0.099	2.976	0	96.5	79.3	125			
Surr: 4-Bromofluorobenzene	1.1		0.9921		110	80	120			

Sample ID: <b>2012d20-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS01</b>	Batch ID: <b>57303</b>	RunNo: <b>74360</b>								
Prep Date: <b>1/2/2021</b>	Analysis Date: <b>1/4/2021</b>	SeqNo: <b>2625564</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	0.9940	0	87.2	76.3	120	1.29	20	
Toluene	0.91	0.050	0.9940	0	91.1	78.5	120	1.79	20	
Ethylbenzene	0.92	0.050	0.9940	0	92.6	78.1	124	1.81	20	
Xylenes, Total	2.8	0.099	2.982	0	94.7	79.3	125	1.61	20	
Surr: 4-Bromofluorobenzene	1.1		0.9940		114	80	120	0	0	

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: Enduring Resources

Work Order Number: 2012D20

RcptNo: 1

Received By: Cheyenne Cason 12/31/2020 7:50:00 AM

Completed By: Isaiah Ortiz 12/31/2020 8:13:43 AM

Reviewed By: JR 12/31/20

I-04

Chain of Custody

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

Log In

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

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by: SGL 12/31/20

Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4	Good	Yes			









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

September 09, 2020

Stuart Hyde

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX:

RE: Chaco 2308 03L 405H

OrderNo.: 2009004

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 36 sample(s) on 9/1/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:00:00 AM

Lab ID: 2009004-001

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2020 4:58:56 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 4:58:56 PM
Surr: DNOP	89.7	30.4-154		%Rec	1	9/1/2020 4:58:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/1/2020 10:49:17 AM
Surr: BFB	96.6	75.3-105		%Rec	1	9/1/2020 10:49:17 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 10:49:17 AM
Toluene	ND	0.045		mg/Kg	1	9/1/2020 10:49:17 AM
Ethylbenzene	ND	0.045		mg/Kg	1	9/1/2020 10:49:17 AM
Xylenes, Total	ND	0.090		mg/Kg	1	9/1/2020 10:49:17 AM
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/1/2020 10:49:17 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 6:53:10 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:05:00 AM

Lab ID: 2009004-002

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/1/2020 6:11:44 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 6:11:44 PM
Surr: DNOP	100	30.4-154		%Rec	1	9/1/2020 6:11:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 11:59:49 AM
Surr: BFB	98.0	75.3-105		%Rec	1	9/1/2020 11:59:49 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 11:59:49 AM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 11:59:49 AM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 11:59:49 AM
Xylenes, Total	ND	0.084		mg/Kg	1	9/1/2020 11:59:49 AM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 11:59:49 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 7:55:13 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS03

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:08:00 AM

Lab ID: 2009004-003

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2020 6:36:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 6:36:17 PM
Surr: DNOP	93.4	30.4-154		%Rec	1	9/1/2020 6:36:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/1/2020 12:23:28 PM
Surr: BFB	98.9	75.3-105		%Rec	1	9/1/2020 12:23:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/1/2020 12:23:28 PM
Toluene	ND	0.051		mg/Kg	1	9/1/2020 12:23:28 PM
Ethylbenzene	ND	0.051		mg/Kg	1	9/1/2020 12:23:28 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 12:23:28 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 12:23:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 8:07:37 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS04

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:10:00 AM

Lab ID: 2009004-004

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2020 7:00:39 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 7:00:39 PM
Surr: DNOP	94.7	30.4-154		%Rec	1	9/1/2020 7:00:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/1/2020 12:47:02 PM
Surr: BFB	97.9	75.3-105		%Rec	1	9/1/2020 12:47:02 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.026		mg/Kg	1	9/1/2020 12:47:02 PM
Toluene	ND	0.051		mg/Kg	1	9/1/2020 12:47:02 PM
Ethylbenzene	ND	0.051		mg/Kg	1	9/1/2020 12:47:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 12:47:02 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 12:47:02 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:20:02 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS05

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:15:00 AM

Lab ID: 2009004-005

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 7:25:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 7:25:08 PM
Surr: DNOP	96.1	30.4-154		%Rec	1	9/1/2020 7:25:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	9/1/2020 1:10:36 PM
Surr: BFB	96.5	75.3-105		%Rec	1	9/1/2020 1:10:36 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.027		mg/Kg	1	9/1/2020 1:10:36 PM
Toluene	ND	0.054		mg/Kg	1	9/1/2020 1:10:36 PM
Ethylbenzene	ND	0.054		mg/Kg	1	9/1/2020 1:10:36 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 1:10:36 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 1:10:36 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 8:32:27 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS06

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:19:00 AM

Lab ID: 2009004-006

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2020 7:49:26 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 7:49:26 PM
Surr: DNOP	90.9	30.4-154		%Rec	1	9/1/2020 7:49:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/1/2020 1:34:07 PM
Surr: BFB	94.8	75.3-105		%Rec	1	9/1/2020 1:34:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 1:34:07 PM
Toluene	ND	0.037		mg/Kg	1	9/1/2020 1:34:07 PM
Ethylbenzene	ND	0.037		mg/Kg	1	9/1/2020 1:34:07 PM
Xylenes, Total	ND	0.074		mg/Kg	1	9/1/2020 1:34:07 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 1:34:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:44:51 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS07

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:21:00 AM

Lab ID: 2009004-007

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/1/2020 8:13:53 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 8:13:53 PM
Surr: DNOP	90.0	30.4-154		%Rec	1	9/1/2020 8:13:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 1:57:37 PM
Surr: BFB	97.9	75.3-105		%Rec	1	9/1/2020 1:57:37 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 1:57:37 PM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 1:57:37 PM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 1:57:37 PM
Xylenes, Total	ND	0.085		mg/Kg	1	9/1/2020 1:57:37 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 1:57:37 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:57:16 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS08

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:25:00 AM

Lab ID: 2009004-008

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 8:38:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 8:38:16 PM
Surr: DNOP	89.3	30.4-154		%Rec	1	9/1/2020 8:38:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	9/1/2020 2:21:18 PM
Surr: BFB	98.0	75.3-105		%Rec	1	9/1/2020 2:21:18 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 2:21:18 PM
Toluene	ND	0.044		mg/Kg	1	9/1/2020 2:21:18 PM
Ethylbenzene	ND	0.044		mg/Kg	1	9/1/2020 2:21:18 PM
Xylenes, Total	ND	0.089		mg/Kg	1	9/1/2020 2:21:18 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 2:21:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:09:40 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS09

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:30:00 AM

Lab ID: 2009004-009

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/1/2020 9:02:39 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2020 9:02:39 PM
Surr: DNOP	91.5	30.4-154		%Rec	1	9/1/2020 9:02:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/1/2020 2:44:52 PM
Surr: BFB	93.5	75.3-105		%Rec	1	9/1/2020 2:44:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 2:44:52 PM
Toluene	ND	0.040		mg/Kg	1	9/1/2020 2:44:52 PM
Ethylbenzene	ND	0.040		mg/Kg	1	9/1/2020 2:44:52 PM
Xylenes, Total	ND	0.081		mg/Kg	1	9/1/2020 2:44:52 PM
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	9/1/2020 2:44:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:22:04 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS10

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:38:00 AM

Lab ID: 2009004-010

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 9:27:14 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 9:27:14 PM
Surr: DNOP	89.9	30.4-154		%Rec	1	9/1/2020 9:27:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 3:55:22 PM
Surr: BFB	97.3	75.3-105		%Rec	1	9/1/2020 3:55:22 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/1/2020 3:55:22 PM
Toluene	ND	0.049		mg/Kg	1	9/1/2020 3:55:22 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 3:55:22 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2020 3:55:22 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 3:55:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:59:17 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS11

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:42:00 AM

Lab ID: 2009004-011

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/1/2020 9:51:38 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2020 9:51:38 PM
Surr: DNOP	91.4	30.4-154		%Rec	1	9/1/2020 9:51:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/1/2020 4:18:52 PM
Surr: BFB	95.9	75.3-105		%Rec	1	9/1/2020 4:18:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 4:18:52 PM
Toluene	ND	0.046		mg/Kg	1	9/1/2020 4:18:52 PM
Ethylbenzene	ND	0.046		mg/Kg	1	9/1/2020 4:18:52 PM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2020 4:18:52 PM
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	9/1/2020 4:18:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 10:11:41 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS12

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:46:00 AM

Lab ID: 2009004-012

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/1/2020 10:16:02 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 10:16:02 PM
Surr: DNOP	93.6	30.4-154		%Rec	1	9/1/2020 10:16:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 4:42:21 PM
Surr: BFB	99.0	75.3-105		%Rec	1	9/1/2020 4:42:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 4:42:21 PM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 4:42:21 PM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 4:42:21 PM
Xylenes, Total	ND	0.084		mg/Kg	1	9/1/2020 4:42:21 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 4:42:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	61		mg/Kg	20	9/1/2020 10:24:06 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS13

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:50:00 AM

Lab ID: 2009004-013

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2020 10:40:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 10:40:27 PM
Surr: DNOP	90.4	30.4-154		%Rec	1	9/1/2020 10:40:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/1/2020 5:05:51 PM
Surr: BFB	98.6	75.3-105		%Rec	1	9/1/2020 5:05:51 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/1/2020 5:05:51 PM
Toluene	ND	0.035		mg/Kg	1	9/1/2020 5:05:51 PM
Ethylbenzene	ND	0.035		mg/Kg	1	9/1/2020 5:05:51 PM
Xylenes, Total	ND	0.071		mg/Kg	1	9/1/2020 5:05:51 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 5:05:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 10:36:30 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS14

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:55:00 AM

Lab ID: 2009004-014

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/1/2020 11:04:47 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 11:04:47 PM
Surr: DNOP	91.6	30.4-154		%Rec	1	9/1/2020 11:04:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/1/2020 5:29:23 PM
Surr: BFB	96.8	75.3-105		%Rec	1	9/1/2020 5:29:23 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 5:29:23 PM
Toluene	ND	0.038		mg/Kg	1	9/1/2020 5:29:23 PM
Ethylbenzene	ND	0.038		mg/Kg	1	9/1/2020 5:29:23 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 5:29:23 PM
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	9/1/2020 5:29:23 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 10:48:54 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS15

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:57:00 AM

Lab ID: 2009004-015

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	24	9.5		mg/Kg	1	9/1/2020 11:29:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 11:29:09 PM
Surr: DNOP	76.2	30.4-154		%Rec	1	9/1/2020 11:29:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.6		mg/Kg	1	9/1/2020 5:52:51 PM
Surr: BFB	95.4	75.3-105		%Rec	1	9/1/2020 5:52:51 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.028		mg/Kg	1	9/1/2020 5:52:51 PM
Toluene	ND	0.056		mg/Kg	1	9/1/2020 5:52:51 PM
Ethylbenzene	ND	0.056		mg/Kg	1	9/1/2020 5:52:51 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 5:52:51 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 5:52:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	250	60		mg/Kg	20	9/1/2020 11:01:19 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS16

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:00:00 AM

Lab ID: 2009004-016

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2020 11:53:21 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 11:53:21 PM
Surr: DNOP	75.9	30.4-154		%Rec	1	9/1/2020 11:53:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/1/2020 6:16:17 PM
Surr: BFB	97.4	75.3-105		%Rec	1	9/1/2020 6:16:17 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 6:16:17 PM
Toluene	ND	0.038		mg/Kg	1	9/1/2020 6:16:17 PM
Ethylbenzene	ND	0.038		mg/Kg	1	9/1/2020 6:16:17 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 6:16:17 PM
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	9/1/2020 6:16:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:13:44 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS17

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:05:00 AM

Lab ID: 2009004-017

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	48	9.6		mg/Kg	1	9/2/2020 12:17:47 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 12:17:47 AM
Surr: DNOP	87.8	30.4-154		%Rec	1	9/2/2020 12:17:47 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/1/2020 6:39:44 PM
Surr: BFB	96.9	75.3-105		%Rec	1	9/1/2020 6:39:44 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/1/2020 6:39:44 PM
Toluene	ND	0.036		mg/Kg	1	9/1/2020 6:39:44 PM
Ethylbenzene	ND	0.036		mg/Kg	1	9/1/2020 6:39:44 PM
Xylenes, Total	ND	0.072		mg/Kg	1	9/1/2020 6:39:44 PM
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	9/1/2020 6:39:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	150	60		mg/Kg	20	9/1/2020 11:26:09 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:20:00 AM

Lab ID: 2009004-018

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/2/2020 1:06:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 1:06:23 AM
Surr: DNOP	70.3	30.4-154		%Rec	1	9/2/2020 1:06:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/1/2020 7:03:08 PM
Surr: BFB	97.5	75.3-105		%Rec	1	9/1/2020 7:03:08 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.026		mg/Kg	1	9/1/2020 7:03:08 PM
Toluene	ND	0.052		mg/Kg	1	9/1/2020 7:03:08 PM
Ethylbenzene	ND	0.052		mg/Kg	1	9/1/2020 7:03:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 7:03:08 PM
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	9/1/2020 7:03:08 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:38:34 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:24:00 AM

Lab ID: 2009004-019

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/2/2020 1:30:34 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2020 1:30:34 AM
Surr: DNOP	79.0	30.4-154		%Rec	1	9/2/2020 1:30:34 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/1/2020 7:26:29 PM
Surr: BFB	94.9	75.3-105		%Rec	1	9/1/2020 7:26:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 7:26:29 PM
Toluene	ND	0.041		mg/Kg	1	9/1/2020 7:26:29 PM
Ethylbenzene	ND	0.041		mg/Kg	1	9/1/2020 7:26:29 PM
Xylenes, Total	ND	0.081		mg/Kg	1	9/1/2020 7:26:29 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 7:26:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:50:58 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW03

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:29:00 AM

Lab ID: 2009004-020

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/2/2020 1:55:09 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/2/2020 1:55:09 AM
Surr: DNOP	68.9	30.4-154		%Rec	1	9/2/2020 1:55:09 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/2/2020 12:28:12 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 4:09:03 PM
Toluene	ND	0.047		mg/Kg	1	9/1/2020 4:09:03 PM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2020 4:09:03 PM
Xylenes, Total	ND	0.094		mg/Kg	1	9/1/2020 4:09:03 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 4:09:03 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2020 4:09:03 PM
Surr: BFB	93.7	70-130		%Rec	1	9/1/2020 4:09:03 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW04

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:32:00 AM

Lab ID: 2009004-021

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	33	9.6		mg/Kg	1	9/2/2020 3:07:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 3:07:50 AM
Surr: DNOP	50.8	30.4-154		%Rec	1	9/2/2020 3:07:50 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 1:30:14 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.027		mg/Kg	1	9/1/2020 5:37:42 PM
Toluene	ND	0.054		mg/Kg	1	9/1/2020 5:37:42 PM
Ethylbenzene	ND	0.054		mg/Kg	1	9/1/2020 5:37:42 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 5:37:42 PM
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: Toluene-d8	103	70-130		%Rec	1	9/1/2020 5:37:42 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	9/1/2020 5:37:42 PM
Surr: BFB	96.5	70-130		%Rec	1	9/1/2020 5:37:42 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW05

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:35:00 AM

Lab ID: 2009004-022

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/2/2020 4:20:36 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 4:20:36 AM
Surr: DNOP	58.4	30.4-154		%Rec	1	9/2/2020 4:20:36 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:07:28 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.028		mg/Kg	1	9/1/2020 7:06:05 PM
Toluene	ND	0.055		mg/Kg	1	9/1/2020 7:06:05 PM
Ethylbenzene	ND	0.055		mg/Kg	1	9/1/2020 7:06:05 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 7:06:05 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: Dibromofluoromethane	91.2	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 7:06:05 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg	1	9/1/2020 7:06:05 PM
Surr: BFB	95.0	70-130		%Rec	1	9/1/2020 7:06:05 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW06

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:40:00 AM

Lab ID: 2009004-023

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/2/2020 4:44:46 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/2/2020 4:44:46 AM
Surr: DNOP	52.3	30.4-154		%Rec	1	9/2/2020 4:44:46 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:19:53 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 7:35:33 PM
Toluene	ND	0.037		mg/Kg	1	9/1/2020 7:35:33 PM
Ethylbenzene	ND	0.037		mg/Kg	1	9/1/2020 7:35:33 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 7:35:33 PM
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 7:35:33 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/1/2020 7:35:33 PM
Surr: BFB	97.8	70-130		%Rec	1	9/1/2020 7:35:33 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW07

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:45:00 AM

Lab ID: 2009004-024

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/2/2020 5:08:56 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/2/2020 5:08:56 AM
Surr: DNOP	64.6	30.4-154		%Rec	1	9/2/2020 5:08:56 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:57:07 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 8:05:09 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 8:05:09 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 8:05:09 PM
Xylenes, Total	ND	0.078		mg/Kg	1	9/1/2020 8:05:09 PM
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 8:05:09 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 8:05:09 PM
Surr: BFB	97.3	70-130		%Rec	1	9/1/2020 8:05:09 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW08

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:50:00 AM

Lab ID: 2009004-025

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	1200	90		mg/Kg	10	9/2/2020 5:33:02 AM
Motor Oil Range Organics (MRO)	910	450		mg/Kg	10	9/2/2020 5:33:02 AM
Surr: DNOP	0	30.4-154	S	%Rec	10	9/2/2020 5:33:02 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	490	60		mg/Kg	20	9/2/2020 3:09:32 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.10	D	mg/Kg	5	9/1/2020 8:34:37 PM
Toluene	ND	0.21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Ethylbenzene	ND	0.21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Xylenes, Total	ND	0.41	D	mg/Kg	5	9/1/2020 8:34:37 PM
Surr: 1,2-Dichloroethane-d4	100	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: 4-Bromofluorobenzene	99.7	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: Dibromofluoromethane	95.2	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: Toluene-d8	104	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Surr: BFB	97.6	70-130	D	%Rec	5	9/1/2020 8:34:37 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW09

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:54:00 AM

Lab ID: 2009004-026

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	17	9.1		mg/Kg	1	9/2/2020 5:57:09 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/2/2020 5:57:09 AM
Surr: DNOP	74.1	30.4-154		%Rec	1	9/2/2020 5:57:09 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 3:21:56 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 9:03:59 PM
Toluene	ND	0.043		mg/Kg	1	9/1/2020 9:03:59 PM
Ethylbenzene	ND	0.043		mg/Kg	1	9/1/2020 9:03:59 PM
Xylenes, Total	ND	0.085		mg/Kg	1	9/1/2020 9:03:59 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 9:03:59 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	9/1/2020 9:03:59 PM
Surr: BFB	96.4	70-130		%Rec	1	9/1/2020 9:03:59 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW10

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:00:00 PM

Lab ID: 2009004-027

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	100	9.4		mg/Kg	1	9/2/2020 6:21:15 AM
Motor Oil Range Organics (MRO)	160	47		mg/Kg	1	9/2/2020 6:21:15 AM
Surr: DNOP	91.5	30.4-154		%Rec	1	9/2/2020 6:21:15 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	180	59		mg/Kg	20	9/2/2020 3:34:20 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 9:33:31 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 9:33:31 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 9:33:31 PM
Xylenes, Total	ND	0.077		mg/Kg	1	9/1/2020 9:33:31 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: Toluene-d8	105	70-130		%Rec	1	9/1/2020 9:33:31 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 9:33:31 PM
Surr: BFB	98.6	70-130		%Rec	1	9/1/2020 9:33:31 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW11

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:04:00 PM

Lab ID: 2009004-028

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/2/2020 6:45:39 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 6:45:39 AM
Surr: DNOP	70.2	30.4-154		%Rec	1	9/2/2020 6:45:39 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	68	60		mg/Kg	20	9/2/2020 3:46:44 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 10:02:52 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 10:02:52 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 10:02:52 PM
Xylenes, Total	ND	0.079		mg/Kg	1	9/1/2020 10:02:52 PM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: Toluene-d8	105	70-130		%Rec	1	9/1/2020 10:02:52 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 10:02:52 PM
Surr: BFB	97.1	70-130		%Rec	1	9/1/2020 10:02:52 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW12

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:10:00 PM

Lab ID: 2009004-029

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	9/2/2020 7:09:44 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 7:09:44 AM
Surr: DNOP	73.9	30.4-154		%Rec	1	9/2/2020 7:09:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 3:59:08 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 10:32:28 PM
Toluene	ND	0.045		mg/Kg	1	9/1/2020 10:32:28 PM
Ethylbenzene	ND	0.045		mg/Kg	1	9/1/2020 10:32:28 PM
Xylenes, Total	ND	0.089		mg/Kg	1	9/1/2020 10:32:28 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: Toluene-d8	103	70-130		%Rec	1	9/1/2020 10:32:28 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/1/2020 10:32:28 PM
Surr: BFB	95.7	70-130		%Rec	1	9/1/2020 10:32:28 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW13

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:15:00 PM

Lab ID: 2009004-030

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	9/2/2020 7:35:14 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 7:35:14 AM
Surr: DNOP	70.4	30.4-154		%Rec	1	9/2/2020 7:35:14 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:11:32 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 11:01:53 PM
Toluene	ND	0.041		mg/Kg	1	9/1/2020 11:01:53 PM
Ethylbenzene	ND	0.041		mg/Kg	1	9/1/2020 11:01:53 PM
Xylenes, Total	ND	0.083		mg/Kg	1	9/1/2020 11:01:53 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 11:01:53 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/1/2020 11:01:53 PM
Surr: BFB	96.8	70-130		%Rec	1	9/1/2020 11:01:53 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW14

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:20:00 PM

Lab ID: 2009004-031

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/2/2020 7:59:05 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 7:59:05 AM
Surr: DNOP	78.6	30.4-154		%Rec	1	9/2/2020 7:59:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:23:57 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 11:31:21 PM
Toluene	ND	0.046		mg/Kg	1	9/1/2020 11:31:21 PM
Ethylbenzene	ND	0.046		mg/Kg	1	9/1/2020 11:31:21 PM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2020 11:31:21 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 11:31:21 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/1/2020 11:31:21 PM
Surr: BFB	93.8	70-130		%Rec	1	9/1/2020 11:31:21 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW15

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:25:00 PM

Lab ID: 2009004-032

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/2/2020 8:23:10 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 8:23:10 AM
Surr: DNOP	79.7	30.4-154		%Rec	1	9/2/2020 8:23:10 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	61		mg/Kg	20	9/2/2020 4:36:22 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/2/2020 12:00:52 AM
Toluene	ND	0.041		mg/Kg	1	9/2/2020 12:00:52 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/2/2020 12:00:52 AM
Xylenes, Total	ND	0.082		mg/Kg	1	9/2/2020 12:00:52 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 12:00:52 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/2/2020 12:00:52 AM
Surr: BFB	96.9	70-130		%Rec	1	9/2/2020 12:00:52 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW16

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:30:00 PM

Lab ID: 2009004-033

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/2/2020 8:47:13 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/2/2020 8:47:13 AM
Surr: DNOP	77.4	30.4-154		%Rec	1	9/2/2020 8:47:13 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:48:46 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/2/2020 12:30:19 AM
Toluene	ND	0.046		mg/Kg	1	9/2/2020 12:30:19 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/2/2020 12:30:19 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/2/2020 12:30:19 AM
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: Toluene-d8	105	70-130		%Rec	1	9/2/2020 12:30:19 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/2/2020 12:30:19 AM
Surr: BFB	96.3	70-130		%Rec	1	9/2/2020 12:30:19 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW17

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:35:00 PM

Lab ID: 2009004-034

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	14	9.4		mg/Kg	1	9/2/2020 9:11:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 9:11:23 AM
Surr: DNOP	77.8	30.4-154		%Rec	1	9/2/2020 9:11:23 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:25:59 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/2/2020 12:59:50 AM
Toluene	ND	0.041		mg/Kg	1	9/2/2020 12:59:50 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/2/2020 12:59:50 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/2/2020 12:59:50 AM
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 12:59:50 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/2/2020 12:59:50 AM
Surr: BFB	98.3	70-130		%Rec	1	9/2/2020 12:59:50 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SP01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 4:00:00 PM

Lab ID: 2009004-035

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	9/2/2020 9:35:29 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 9:35:29 AM
Surr: DNOP	85.7	30.4-154		%Rec	1	9/2/2020 9:35:29 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:38:23 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/2/2020 3:27:16 AM
Toluene	ND	0.038		mg/Kg	1	9/2/2020 3:27:16 AM
Ethylbenzene	ND	0.038		mg/Kg	1	9/2/2020 3:27:16 AM
Xylenes, Total	ND	0.077		mg/Kg	1	9/2/2020 3:27:16 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 3:27:16 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/2/2020 3:27:16 AM
Surr: BFB	94.3	70-130		%Rec	1	9/2/2020 3:27:16 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SP02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 4:15:00 PM

Lab ID: 2009004-036

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	9.5	8.7		mg/Kg	1	9/2/2020 9:59:39 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 9:59:39 AM
Surr: DNOP	87.0	30.4-154		%Rec	1	9/2/2020 9:59:39 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:50:47 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.018		mg/Kg	1	9/2/2020 3:56:55 AM
Toluene	ND	0.036		mg/Kg	1	9/2/2020 3:56:55 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/2/2020 3:56:55 AM
Xylenes, Total	ND	0.072		mg/Kg	1	9/2/2020 3:56:55 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: Dibromofluoromethane	94.8	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 3:56:55 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/2/2020 3:56:55 AM
Surr: BFB	94.8	70-130		%Rec	1	9/2/2020 3:56:55 AM

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>MB-54869</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54869</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499684</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54869</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54869</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499685</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Sample ID: <b>MB-54870</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54870</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499716</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54870</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54870</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499717</b>	Units: <b>mg/Kg</b>							
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			

**Qualifiers:**

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

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

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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>2009004-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash FS01</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499210</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.1	45.70	0	98.3	47.4	136			
Surr: DNOP	3.9		4.570		86.3	30.4	154			

Sample ID: <b>2009004-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash FS01</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499211</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	48.92	0	99.0	47.4	136	7.51	43.4	
Surr: DNOP	4.3		4.892		86.9	30.4	154	0	0	

Sample ID: <b>2009004-021AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash SW04</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499232</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	9.7	48.64	32.72	70.9	47.4	136			
Surr: DNOP	2.0		4.864		41.7	30.4	154			

Sample ID: <b>2009004-021AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash SW04</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499233</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	9.5	47.30	32.72	208	47.4	136	64.6	43.4	RS
Surr: DNOP	2.6		4.730		55.4	30.4	154	0	0	

Sample ID: <b>LCS-54854</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499249</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	70	130			
Surr: DNOP	4.2		5.000		84.5	30.4	154			

Sample ID: <b>LCS-54857</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499250</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>LCS-54857</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>54857</b>				RunNo: <b>71526</b>					
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>				SeqNo: <b>2499250</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	70	130			
Surr: DNOP	3.0		5.000		60.6	30.4	154			

Sample ID: <b>MB-54854</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>PBS</b>	Batch ID: <b>54854</b>				RunNo: <b>71526</b>					
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>				SeqNo: <b>2499251</b>	Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.0	30.4	154			

Sample ID: <b>MB-54857</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>PBS</b>	Batch ID: <b>54857</b>				RunNo: <b>71526</b>					
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>				SeqNo: <b>2499252</b>	Units: <b>mg/Kg</b>				
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	6.8		10.00		68.3	30.4	154			

Sample ID: <b>LCS-54907</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>54907</b>				RunNo: <b>71526</b>					
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/4/2020</b>				SeqNo: <b>2502752</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	30.4	154			

Sample ID: <b>MB-54907</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID: <b>PBS</b>	Batch ID: <b>54907</b>				RunNo: <b>71526</b>					
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/4/2020</b>				SeqNo: <b>2502753</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	30.4	154			

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498901</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.0	75.3	105			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498902</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	25.00	0	76.8	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498939</b>		Units: <b>mg/Kg</b>					
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	0.99		1.000		98.8	80	120			

Sample ID: <b>100ng btex lcsb</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498940</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.3	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: <b>2009004-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>Wash FS01</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498961</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.022	0.8985	0	96.8	76.3	120			
Toluene	0.87	0.045	0.8985	0	96.8	78.5	120			
Ethylbenzene	0.88	0.045	0.8985	0	97.5	78.1	124			
Xylenes, Total	2.6	0.090	2.695	0	97.7	79.3	125			
Surr: 4-Bromofluorobenzene	0.96		0.8985		106	80	120			

Sample ID: <b>2009004-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>Wash FS01</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498962</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.022	0.8985	0	96.0	76.3	120	0.820	20	
Toluene	0.87	0.045	0.8985	0	96.6	78.5	120	0.217	20	
Ethylbenzene	0.88	0.045	0.8985	0	98.2	78.1	124	0.664	20	
Xylenes, Total	2.7	0.090	2.695	0	98.7	79.3	125	1.09	20	
Surr: 4-Bromofluorobenzene	0.98		0.8985		109	80	120	0	0	

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499776</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.7	70	130			
Toluene	1.1	0.050	1.000	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.4	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.4	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: <b>2009004-020ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>Wash SW03</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499779</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.023	0.9381	0	92.3	67.9	137			
Toluene	1.0	0.047	0.9381	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.4690		91.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4690		95.6	70	130			
Surr: Dibromofluoromethane	0.44		0.4690		94.3	70	130			
Surr: Toluene-d8	0.50		0.4690		106	70	130			

Sample ID: <b>2009004-020amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>Wash SW03</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499781</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.023	0.9381	0	87.0	67.9	137	5.91	20	
Toluene	0.95	0.047	0.9381	0	102	70	130	6.92	20	
Surr: 1,2-Dichloroethane-d4	0.43		0.4690		91.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4690		96.8	70	130	0	0	
Surr: Dibromofluoromethane	0.43		0.4690		92.5	70	130	0	0	
Surr: Toluene-d8	0.48		0.4690		102	70	130	0	0	

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499798</b>	Units: <b>mg/Kg</b>							
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								

**Qualifiers:**

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

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2009004

09-Sep-20

Client: LTE

Project: Chaco 2308 03L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>PBS</b>	Batch ID: <b>R71559</b>			RunNo: <b>71559</b>						
Prep Date:	Analysis Date: <b>9/1/2020</b>			SeqNo: <b>2499798</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.4	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

### Qualifiers:

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

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

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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2499999</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.5	70	130			
Surr: BFB	470		500.0		93.5	70	130			

Sample ID: <b>2009004-021ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>Wash SW04</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500002</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.4	27.12	0	92.8	49.2	122			
Surr: BFB	530		542.3		97.8	70	130			

Sample ID: <b>2009004-021amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>Wash SW04</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500003</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.4	27.12	0	89.2	49.2	122	4.00	20	
Surr: BFB	510		542.3		93.5	70	130	0	0	

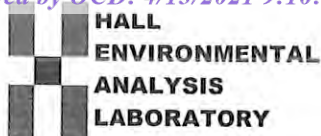
Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500019</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		99.1	70	130			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **LTE**Work Order Number: **2009004**RcptNo: **1**Received By: **Cheyenne Cason** 9/1/2020 8:00:00 AMCompleted By: **Isaiah Ortiz** 9/1/2020 8:22:38 AMReviewed By: **SPA 9.1.20 / 9:45**

I-OK

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 9/1/20

one 9/1/20

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			
2	3.2	Good	Yes			

















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

September 11, 2020

Stuart Hyde

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX:

RE: Chaco 2308 3L 405H

OrderNo.: 2009304

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 25 sample(s) on 9/4/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW01

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:30:00 AM

Lab ID: 2009304-001

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 6:28:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:28:58 AM
Surr: DNOP	69.3	30.4-154		%Rec	1	9/6/2020 6:28:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 1:21:22 AM
Surr: BFB	93.9	75.3-105		%Rec	1	9/5/2020 1:21:22 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/5/2020 1:21:22 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 1:21:22 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 1:21:22 AM
Xylenes, Total	ND	0.080		mg/Kg	1	9/5/2020 1:21:22 AM
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	9/5/2020 1:21:22 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	1000	60		mg/Kg	20	9/6/2020 4:00:29 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW02

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:33:00 AM

Lab ID: 2009304-002

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 7:41:43 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 7:41:43 AM
Surr: DNOP	65.4	30.4-154		%Rec	1	9/6/2020 7:41:43 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/5/2020 1:44:44 AM
Surr: BFB	94.2	75.3-105		%Rec	1	9/5/2020 1:44:44 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/5/2020 1:44:44 AM
Toluene	ND	0.037		mg/Kg	1	9/5/2020 1:44:44 AM
Ethylbenzene	ND	0.037		mg/Kg	1	9/5/2020 1:44:44 AM
Xylenes, Total	ND	0.075		mg/Kg	1	9/5/2020 1:44:44 AM
Surr: 4-Bromofluorobenzene	98.0	80-120		%Rec	1	9/5/2020 1:44:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	280	60		mg/Kg	20	9/6/2020 11:47:02 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW03

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:36:00 AM

Lab ID: 2009304-003

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/6/2020 8:30:18 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 8:30:18 AM
Surr: DNOP	78.1	30.4-154		%Rec	1	9/6/2020 8:30:18 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 2:08:15 AM
Surr: BFB	93.7	75.3-105		%Rec	1	9/5/2020 2:08:15 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/5/2020 2:08:15 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 2:08:15 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 2:08:15 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/5/2020 2:08:15 AM
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	9/5/2020 2:08:15 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	630	60		mg/Kg	20	9/6/2020 12:24:15 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW04

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:40:00 AM

Lab ID: 2009304-004

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 8:54:29 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 8:54:29 AM
Surr: DNOP	67.4	30.4-154		%Rec	1	9/6/2020 8:54:29 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 2:31:51 AM
Surr: BFB	93.9	75.3-105		%Rec	1	9/5/2020 2:31:51 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/5/2020 2:31:51 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 2:31:51 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 2:31:51 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/5/2020 2:31:51 AM
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	9/5/2020 2:31:51 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	1000	60		mg/Kg	20	9/6/2020 1:01:27 PM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW05

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:43:00 AM

Lab ID: 2009304-005

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/6/2020 9:18:52 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 9:18:52 AM
Surr: DNOP	59.9	30.4-154		%Rec	1	9/6/2020 9:18:52 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/6/2020 3:22:31 AM
Surr: BFB	93.0	75.3-105		%Rec	1	9/6/2020 3:22:31 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/6/2020 3:22:31 AM
Toluene	ND	0.040		mg/Kg	1	9/6/2020 3:22:31 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/6/2020 3:22:31 AM
Xylenes, Total	ND	0.080		mg/Kg	1	9/6/2020 3:22:31 AM
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	9/6/2020 3:22:31 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 1:13:52 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW06

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:46:00 AM

Lab ID: 2009304-006

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2020 9:43:07 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 9:43:07 AM
Surr: DNOP	68.1	30.4-154		%Rec	1	9/6/2020 9:43:07 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/6/2020 3:46:04 AM
Surr: BFB	95.2	75.3-105		%Rec	1	9/6/2020 3:46:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/6/2020 3:46:04 AM
Toluene	ND	0.036		mg/Kg	1	9/6/2020 3:46:04 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/6/2020 3:46:04 AM
Xylenes, Total	ND	0.071		mg/Kg	1	9/6/2020 3:46:04 AM
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/6/2020 3:46:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 1:51:06 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW07

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:50:00 AM

Lab ID: 2009304-007

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2020 10:07:32 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 10:07:32 AM
Surr: DNOP	63.9	30.4-154		%Rec	1	9/6/2020 10:07:32 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/6/2020 4:09:26 AM
Surr: BFB	92.0	75.3-105		%Rec	1	9/6/2020 4:09:26 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/6/2020 4:09:26 AM
Toluene	ND	0.038		mg/Kg	1	9/6/2020 4:09:26 AM
Ethylbenzene	ND	0.038		mg/Kg	1	9/6/2020 4:09:26 AM
Xylenes, Total	ND	0.077		mg/Kg	1	9/6/2020 4:09:26 AM
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	9/6/2020 4:09:26 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 2:03:30 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW08

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:53:00 AM

Lab ID: 2009304-008

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 10:31:48 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 10:31:48 AM
Surr: DNOP	97.3	30.4-154		%Rec	1	9/6/2020 10:31:48 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/6/2020 4:32:50 AM
Surr: BFB	96.1	75.3-105		%Rec	1	9/6/2020 4:32:50 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/6/2020 4:32:50 AM
Toluene	ND	0.050		mg/Kg	1	9/6/2020 4:32:50 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/6/2020 4:32:50 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/6/2020 4:32:50 AM
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	9/6/2020 4:32:50 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 2:15:55 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW09

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:56:00 AM

Lab ID: 2009304-009

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 10:56:24 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 10:56:24 AM
Surr: DNOP	77.3	30.4-154		%Rec	1	9/6/2020 10:56:24 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/6/2020 4:56:12 AM
Surr: BFB	95.5	75.3-105		%Rec	1	9/6/2020 4:56:12 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.017		mg/Kg	1	9/6/2020 4:56:12 AM
Toluene	ND	0.035		mg/Kg	1	9/6/2020 4:56:12 AM
Ethylbenzene	ND	0.035		mg/Kg	1	9/6/2020 4:56:12 AM
Xylenes, Total	ND	0.070		mg/Kg	1	9/6/2020 4:56:12 AM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/6/2020 4:56:12 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	270	60		mg/Kg	20	9/6/2020 2:28:19 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS01

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:20:00 AM

Lab ID: 2009304-010

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/6/2020 11:20:40 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 11:20:40 AM
Surr: DNOP	73.8	30.4-154		%Rec	1	9/6/2020 11:20:40 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	9/6/2020 5:20:04 AM
Surr: BFB	98.7	75.3-105		%Rec	1	9/6/2020 5:20:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/6/2020 5:20:04 AM
Toluene	ND	0.043		mg/Kg	1	9/6/2020 5:20:04 AM
Ethylbenzene	ND	0.043		mg/Kg	1	9/6/2020 5:20:04 AM
Xylenes, Total	ND	0.085		mg/Kg	1	9/6/2020 5:20:04 AM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/6/2020 5:20:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	220	60		mg/Kg	20	9/6/2020 2:40:43 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS02

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:23:00 AM

Lab ID: 2009304-011

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2020 11:45:05 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 11:45:05 AM
Surr: DNOP	75.3	30.4-154		%Rec	1	9/6/2020 11:45:05 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/6/2020 5:44:05 AM
Surr: BFB	98.1	75.3-105		%Rec	1	9/6/2020 5:44:05 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/6/2020 5:44:05 AM
Toluene	ND	0.051		mg/Kg	1	9/6/2020 5:44:05 AM
Ethylbenzene	ND	0.051		mg/Kg	1	9/6/2020 5:44:05 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/6/2020 5:44:05 AM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/6/2020 5:44:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	540	60		mg/Kg	20	9/6/2020 2:53:08 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS03

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:26:00 AM

Lab ID: 2009304-012

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:09:21 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:09:21 PM
Surr: DNOP	74.1	30.4-154		%Rec	1	9/6/2020 12:09:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	460	60		mg/Kg	20	9/6/2020 3:05:32 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 5:47:37 AM
Toluene	ND	0.046		mg/Kg	1	9/5/2020 5:47:37 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2020 5:47:37 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2020 5:47:37 AM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: Toluene-d8	95.9	70-130		%Rec	1	9/5/2020 5:47:37 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2020 5:47:37 AM
Surr: BFB	103	70-130		%Rec	1	9/5/2020 5:47:37 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS04

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:29:00 AM

Lab ID: 2009304-013

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:33:44 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:33:44 PM
Surr: DNOP	71.6	30.4-154		%Rec	1	9/6/2020 12:33:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	230	60		mg/Kg	20	9/6/2020 3:17:57 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2020 6:16:05 AM
Toluene	ND	0.050		mg/Kg	1	9/5/2020 6:16:05 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/5/2020 6:16:05 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 6:16:05 AM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: Toluene-d8	97.2	70-130		%Rec	1	9/5/2020 6:16:05 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/5/2020 6:16:05 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 6:16:05 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS05

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:32:00 AM

Lab ID: 2009304-014

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:58:05 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:58:05 PM
Surr: DNOP	53.6	30.4-154		%Rec	1	9/6/2020 12:58:05 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	490	60		mg/Kg	20	9/6/2020 3:30:21 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2020 6:44:33 AM
Toluene	ND	0.050		mg/Kg	1	9/5/2020 6:44:33 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/5/2020 6:44:33 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 6:44:33 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: Toluene-d8	95.3	70-130		%Rec	1	9/5/2020 6:44:33 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/5/2020 6:44:33 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 6:44:33 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS06

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:35:00 AM

Lab ID: 2009304-015

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/6/2020 1:22:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 1:22:33 PM
Surr: DNOP	65.7	30.4-154		%Rec	1	9/6/2020 1:22:33 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	9/6/2020 3:42:46 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.026		mg/Kg	1	9/5/2020 7:13:13 AM
Toluene	ND	0.052		mg/Kg	1	9/5/2020 7:13:13 AM
Ethylbenzene	ND	0.052		mg/Kg	1	9/5/2020 7:13:13 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 7:13:13 AM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: Dibromofluoromethane	115	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: Toluene-d8	96.4	70-130		%Rec	1	9/5/2020 7:13:13 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/5/2020 7:13:13 AM
Surr: BFB	106	70-130		%Rec	1	9/5/2020 7:13:13 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS07

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:38:00 AM

Lab ID: 2009304-016

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 1:46:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 1:46:59 PM
Surr: DNOP	85.9	30.4-154		%Rec	1	9/6/2020 1:46:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 4:20:00 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 7:41:52 AM
Toluene	ND	0.045		mg/Kg	1	9/5/2020 7:41:52 AM
Ethylbenzene	ND	0.045		mg/Kg	1	9/5/2020 7:41:52 AM
Xylenes, Total	ND	0.090		mg/Kg	1	9/5/2020 7:41:52 AM
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: Dibromofluoromethane	112	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: Toluene-d8	97.1	70-130		%Rec	1	9/5/2020 7:41:52 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/5/2020 7:41:52 AM
Surr: BFB	110	70-130		%Rec	1	9/5/2020 7:41:52 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS08

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:41:00 AM

Lab ID: 2009304-017

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/6/2020 2:11:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 2:11:28 PM
Surr: DNOP	60.6	30.4-154		%Rec	1	9/6/2020 2:11:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	9/6/2020 4:32:24 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 8:10:22 AM
Toluene	ND	0.046		mg/Kg	1	9/5/2020 8:10:22 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2020 8:10:22 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2020 8:10:22 AM
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: Toluene-d8	94.5	70-130		%Rec	1	9/5/2020 8:10:22 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2020 8:10:22 AM
Surr: BFB	105	70-130		%Rec	1	9/5/2020 8:10:22 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS09

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:44:00 AM

Lab ID: 2009304-018

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 2:35:48 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 2:35:48 PM
Surr: DNOP	68.2	30.4-154		%Rec	1	9/6/2020 2:35:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	9/6/2020 4:44:48 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.019		mg/Kg	1	9/5/2020 8:38:50 AM
Toluene	ND	0.037		mg/Kg	1	9/5/2020 8:38:50 AM
Ethylbenzene	ND	0.037		mg/Kg	1	9/5/2020 8:38:50 AM
Xylenes, Total	ND	0.074		mg/Kg	1	9/5/2020 8:38:50 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: Toluene-d8	96.1	70-130		%Rec	1	9/5/2020 8:38:50 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/5/2020 8:38:50 AM
Surr: BFB	112	70-130		%Rec	1	9/5/2020 8:38:50 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS10

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:47:00 AM

Lab ID: 2009304-019

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 3:00:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 3:00:22 PM
Surr: DNOP	78.5	30.4-154		%Rec	1	9/6/2020 3:00:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 4:57:13 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	9/5/2020 9:07:20 AM
Toluene	ND	0.042		mg/Kg	1	9/5/2020 9:07:20 AM
Ethylbenzene	ND	0.042		mg/Kg	1	9/5/2020 9:07:20 AM
Xylenes, Total	ND	0.083		mg/Kg	1	9/5/2020 9:07:20 AM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: Toluene-d8	94.4	70-130		%Rec	1	9/5/2020 9:07:20 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/5/2020 9:07:20 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 9:07:20 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS11

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:50:00 AM

Lab ID: 2009304-020

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2020 3:24:53 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 3:24:53 PM
Surr: DNOP	81.7	30.4-154		%Rec	1	9/6/2020 3:24:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 5:09:37 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	9/5/2020 9:36:03 AM
Toluene	ND	0.041		mg/Kg	1	9/5/2020 9:36:03 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/5/2020 9:36:03 AM
Xylenes, Total	ND	0.082		mg/Kg	1	9/5/2020 9:36:03 AM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: Toluene-d8	95.3	70-130		%Rec	1	9/5/2020 9:36:03 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/5/2020 9:36:03 AM
Surr: BFB	106	70-130		%Rec	1	9/5/2020 9:36:03 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS12

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:53:00 AM

Lab ID: 2009304-021

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 5:02:28 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 5:02:28 PM
Surr: DNOP	82.0	30.4-154		%Rec	1	9/6/2020 5:02:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 5:22:01 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.020		mg/Kg	1	9/5/2020 4:29:46 AM
Toluene	ND	0.039		mg/Kg	1	9/5/2020 4:29:46 AM
Ethylbenzene	ND	0.039		mg/Kg	1	9/5/2020 4:29:46 AM
Xylenes, Total	ND	0.078		mg/Kg	1	9/5/2020 4:29:46 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: Toluene-d8	102	70-130		%Rec	1	9/5/2020 4:29:46 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/5/2020 4:29:46 AM
Surr: BFB	96.7	70-130		%Rec	1	9/5/2020 4:29:46 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS13

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:56:00 AM

Lab ID: 2009304-022

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 6:15:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:15:59 PM
Surr: DNOP	65.2	30.4-154		%Rec	1	9/6/2020 6:15:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 9:59:23 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2020 5:59:03 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2020 5:59:03 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2020 5:59:03 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/5/2020 5:59:03 AM
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: Dibromofluoromethane	94.4	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: Toluene-d8	106	70-130		%Rec	1	9/5/2020 5:59:03 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2020 5:59:03 AM
Surr: BFB	95.8	70-130		%Rec	1	9/5/2020 5:59:03 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS14

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:59:00 AM

Lab ID: 2009304-023

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/6/2020 6:40:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:40:26 PM
Surr: DNOP	76.4	30.4-154		%Rec	1	9/6/2020 6:40:26 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	150	60		mg/Kg	20	9/8/2020 10:36:27 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.026		mg/Kg	1	9/5/2020 7:27:30 AM
Toluene	ND	0.052		mg/Kg	1	9/5/2020 7:27:30 AM
Ethylbenzene	ND	0.052		mg/Kg	1	9/5/2020 7:27:30 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 7:27:30 AM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: Dibromofluoromethane	98.7	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/5/2020 7:27:30 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/5/2020 7:27:30 AM
Surr: BFB	94.7	70-130		%Rec	1	9/5/2020 7:27:30 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW08-B

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 12:25:00 PM

Lab ID: 2009304-024

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 7:04:56 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 7:04:56 PM
Surr: DNOP	57.6	30.4-154		%Rec	1	9/6/2020 7:04:56 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 11:13:28 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.018		mg/Kg	1	9/5/2020 7:57:04 AM
Toluene	ND	0.036		mg/Kg	1	9/5/2020 7:57:04 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/5/2020 7:57:04 AM
Xylenes, Total	ND	0.072		mg/Kg	1	9/5/2020 7:57:04 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: Toluene-d8	103	70-130		%Rec	1	9/5/2020 7:57:04 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/5/2020 7:57:04 AM
Surr: BFB	93.4	70-130		%Rec	1	9/5/2020 7:57:04 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW10-B

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 12:30:00 PM

Lab ID: 2009304-025

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 7:29:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 7:29:30 PM
Surr: DNOP	73.6	30.4-154		%Rec	1	9/6/2020 7:29:30 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 11:25:49 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.018		mg/Kg	1	9/5/2020 8:27:10 AM
Toluene	ND	0.036		mg/Kg	1	9/5/2020 8:27:10 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/5/2020 8:27:10 AM
Xylenes, Total	ND	0.073		mg/Kg	1	9/5/2020 8:27:10 AM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: Toluene-d8	103	70-130		%Rec	1	9/5/2020 8:27:10 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/5/2020 8:27:10 AM
Surr: BFB	93.5	70-130		%Rec	1	9/5/2020 8:27:10 AM

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>MB-54979</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54979</b>	RunNo: <b>71656</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2505307</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54979</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54979</b>	RunNo: <b>71656</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2505308</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	90	110			

Sample ID: <b>MB-54983</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54983</b>	RunNo: <b>71671</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2506197</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54983</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54983</b>	RunNo: <b>71671</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2506198</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			

Sample ID: <b>MB-55006</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55006</b>	RunNo: <b>71685</b>								
Prep Date: <b>9/8/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506856</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-55006</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55006</b>	RunNo: <b>71685</b>								
Prep Date: <b>9/8/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506857</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

**Qualifiers:**

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

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>LCS-54951</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54951</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2505398</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		79.7	30.4	154			

Sample ID: <b>LCS-54955</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54955</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2505399</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.3	30.4	154			

Sample ID: <b>LCS-54958</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54958</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>		SeqNo: <b>2505400</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	70	130			
Surr: DNOP	2.2		5.000		43.5	30.4	154			

Sample ID: <b>LCS-54959</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54959</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>		SeqNo: <b>2505401</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	99.0	70	130			
Surr: DNOP	3.6		5.000		71.3	30.4	154			

Sample ID: <b>MB-54951</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>54951</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2505403</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.3	30.4	154			

Sample ID: <b>MB-54955</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>54955</b>		RunNo: <b>71657</b>							
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2505404</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		82.6	30.4	154			

**Qualifiers:**

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D Sample Diluted Due to Matrix  
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ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE**Project:** Chaco 2308 3L 405H

Sample ID: <b>MB-54958</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505405</b>	Units: <b>mg/Kg</b>							
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	5.6		10.00		56.0	30.4	154			

Sample ID: <b>MB-54959</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54959</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505406</b>	Units: <b>mg/Kg</b>							
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	7.9		10.00		79.3	30.4	154			

Sample ID: <b>2009304-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area SW01</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505513</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.50	0	115	47.4	136			
Surr: DNOP	3.4		4.950		69.6	30.4	154			

Sample ID: <b>2009304-021AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>54959</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505515</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.3	46.51	0	92.0	47.4	136			
Surr: DNOP	3.0		4.651		65.1	30.4	154			

Sample ID: <b>2009304-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area SW01</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505521</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.31	0	123	47.4	136	6.14	43.4	
Surr: DNOP	3.8		4.931		77.9	30.4	154	0	0	

**Qualifiers:**

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

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>2009304-021AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>54959</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505522</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.1	45.58	0	82.7	47.4	136	12.7	43.4	
Surr: DNOP	2.7		4.558		58.9	30.4	154	0	0	

### Qualifiers:

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>ics-54867</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54867</b>			RunNo: <b>71646</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2504664</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.3	72.5	106			
Surr: BFB	1100		1000		109	75.3	105			S

Sample ID: <b>mb-54867</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54867</b>			RunNo: <b>71646</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2504666</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	75.3	105			

Sample ID: <b>mb-54909</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54909</b>			RunNo: <b>71654</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505130</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.3	75.3	105			

Sample ID: <b>ics-54909</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54909</b>			RunNo: <b>71654</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505131</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.2	72.5	106			
Surr: BFB	1100		1000		108	75.3	105			S

Sample ID: <b>mb-54964</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506602</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.0	75.3	105			

Sample ID: <b>ics-54964</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506603</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	75.3	105			S

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE**Project:** Chaco 2308 3L 405H

Sample ID: <b>LCS-54867</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54867</b>	RunNo: <b>71646</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504717</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.6	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: <b>mb-54867</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54867</b>	RunNo: <b>71646</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504719</b> Units: <b>mg/Kg</b>								
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		100	80	120			

Sample ID: <b>mb-54909</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54909</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506639</b> Units: <b>mg/Kg</b>								
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		101	80	120			

Sample ID: <b>lcs-54909</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54909</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506640</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.5	80	120			
Toluene	0.86	0.050	1.000	0	85.9	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

**Qualifiers:**

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

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb-54964</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54964</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506653</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		97.8	80	120			

Sample ID: <b>LCS-54964</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54964</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506654</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

### Qualifiers:

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

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504224</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.2	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504225</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.6	70	130			
Toluene	1.0	0.050	1.000	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.1	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.7	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: <b>2009304-021ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504227</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.020	0.7843	0	92.3	67.9	137			
Toluene	0.83	0.039	0.7843	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	0.36		0.3922		92.8	70	130			
Surr: 4-Bromofluorobenzene	0.37		0.3922		94.0	70	130			
Surr: Dibromofluoromethane	0.38		0.3922		96.4	70	130			
Surr: Toluene-d8	0.41		0.3922		104	70	130			

Sample ID: <b>2009304-021amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504228</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.020	0.7843	0	86.8	67.9	137	6.14	20	
Toluene	0.79	0.039	0.7843	0	100	70	130	4.62	20	

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>2009304-021amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504228</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.37		0.3922		94.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.36		0.3922		91.9	70	130	0	0	
Surr: Dibromofluoromethane	0.37		0.3922		94.7	70	130	0	0	
Surr: Toluene-d8	0.40		0.3922		101	70	130	0	0	

Sample ID: <b>mb-54944</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54944</b>	RunNo: <b>71645</b>								
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504612</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		97.0	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.5	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.46		0.5000		91.8	70	130			

Sample ID: <b>Ics-54944</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>54944</b>	RunNo: <b>71645</b>								
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504722</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.3	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>	RunNo: <b>71651</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504912</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.4	70	130			

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>			RunNo: <b>71651</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2504912</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.48		0.5000		96.6	70	130			

Sample ID: <b>lcs-54900</b>	SampType: <b>LCS4</b>			TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>BatchQC</b>	Batch ID: <b>54900</b>			RunNo: <b>71651</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2504913</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

**Qualifiers:**

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

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504255</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		94.4	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504256</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.9	70	130			
Surr: BFB	470		500.0		94.0	70	130			

Sample ID: <b>2009304-022ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>SW Area FS13</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504259</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.02	0	85.6	49.2	122			
Surr: BFB	440		480.3		92.0	70	130			

Sample ID: <b>2009304-022amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>SW Area FS13</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504260</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.02	0	83.6	49.2	122	2.41	20	
Surr: BFB	440		480.3		92.2	70	130	0	0	

Sample ID: <b>mb-54944</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>54944</b>		RunNo: <b>71645</b>							
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504782</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		103	70	130			

Sample ID: <b>lcs-54944</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54944</b>		RunNo: <b>71645</b>							
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504783</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>ics-54944</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54944</b>			RunNo: <b>71645</b>						
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2504783</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.6	70	130			
Surr: BFB	530		500.0		107	70	130			

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>			RunNo: <b>71651</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2504946</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	520		500.0		105	70	130			

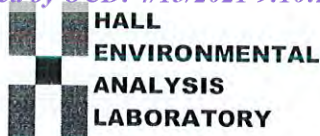
Sample ID: <b>ics-54900</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54900</b>			RunNo: <b>71651</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2504947</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	540		500.0		107	70	130			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **LTE**Work Order Number: **2009304**RcptNo: **1**Received By: **Cheyenne Cason** **9/4/2020 8:00:00 AM**Completed By: **Isaiah Ortiz** **9/4/2020 8:34:01 AM**Reviewed By: *LB* *9/4/20* *IOX*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: *cmc 9/4/20*

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			
2	1.1	Good	Yes			



## Chain-of-Custody Record

Turn-Around Time:

Client: LT Environmental

☐ Standard ☒ Rush Next Day

Mailing Address: 848 E. 2nd Ave.

Project Name:

Chaco 2308 3L 405H

Durango, CO 81301

Project #:

99520004

Phone #: 970-385-1096

email or Fax#: [shyde@ltenv.com](mailto:shyde@ltenv.com)

Project Manager:

Stuart Hyde

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other \_\_\_\_\_☐ EDD (Type) \_\_\_\_\_

Sampler: Eric Carroll

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): See inst plus

Date Time Matrix Sample Name

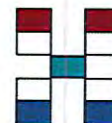
Container Type and #

Preservative Type

HEAL No.

2009304

9/3/2020	1030	Soil	SW Area SW01	1 4 oz.	Cool	001
9/3/2020	1033	Soil	SW Area SW02	1 4 oz.	Cool	002
9/3/2020	1036	Soil	SW Area SW03	1 4 oz.	Cool	003
9/3/2020	1040	Soil	SW Area SW04	1 4 oz.	Cool	004
9/3/2020	1043	Soil	SW Area SW05	1 4 oz.	Cool	005
9/3/2020	1046	Soil	SW Area SW06	1 4 oz.	Cool	006
9/3/2020	1050	Soil	SW Area SW07	1 4 oz.	Cool	007
9/3/2020	1053	Soil	SW Area SW08	1 4 oz.	Cool	008
9/3/2020	1056	Soil	SW Area SW09	1 4 oz.	Cool	009
9/3/2020	1126	Soil	SW Area FS01	1 4 oz.	Cool	010
9/3/2020	1123	Soil	SW Area FS02	1 4 oz.	Cool	011
9/3/2020	1126	Soil	SW Area FS03	1 4 oz.	Cool	012

Date: 9/3/2020 Time: 1340 Relinquished by: Eric CarrollReceived by: Stuart Hyde Via: \_\_\_\_\_ Date: 9/3/2020 Time: 1340Date: 9/3/2020 Time: 1910 Relinquished by: Stuart HydeReceived by: Eric Carroll Via: \_\_\_\_\_ Date: 9/4/2020 Time: 0800

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														
x	x				x														

Remarks:







## Chain-of-Custody Record

Turn-Around Time:

Client: LT Environmental

☐ Standard ☒ Rush Next Day

Mailing Address: 848 E. 2nd Ave.

Project Name:

Chaco 2308 3L 405H

Durango, CO 81301

Project #:

99520004

Phone #: 970-385-1096

email or Fax#: [shyde@ltenv.com](mailto:shyde@ltenv.com)

Project Manager:

Stuart Hyde

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other \_\_\_\_\_☐ EDD (Type) \_\_\_\_\_

Sampler: Eric Carroll

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): See first pageContainer  
Type and #Preservative  
Type

HEAL No.

7009304

025

Date Time Matrix Sample Name

9/3/2020 1230 Soil SW Area Wash SW10-B

9/3/2020 Soil SW Area

9/3/2020 Soil SW Area

9/3/2020 Soil SW Area

9/3/2020 Soil SW Area

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Received by:

Via:

Date

Time

Date:

Time:

Relinquished by:

9/3

1340

Eric Carroll

Received by:

Via:

9/3/2020

1340

9/3/2020

1910

Stuart Hyde

Received by:

Via:

Date

Time

9/3/2020

1910

Stuart Hyde

Received by:

Via:

Date

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9/3/2020

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Stuart Hyde

Received by:





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

January 14, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX:

RE: Chaco 404H

OrderNo.: 2101385

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 12 sample(s) on 1/12/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS03-B

Project: Chaco 404H

Collection Date: 1/11/2021 12:56:00 PM

Lab ID: 2101385-001

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	570	60		mg/Kg	20	1/12/2021 4:16:27 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/12/2021 10:41:44 AM	57477
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2021 10:41:44 AM	57477
Surr: DNOP	98.0	30.4-154		%Rec	1	1/12/2021 10:41:44 AM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	1/12/2021 12:16:21 PM	G74578
Surr: BFB	103	75.3-105		%Rec	1	1/12/2021 12:16:21 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2021 12:16:21 PM	B74578
Toluene	ND	0.051		mg/Kg	1	1/12/2021 12:16:21 PM	B74578
Ethylbenzene	ND	0.051		mg/Kg	1	1/12/2021 12:16:21 PM	B74578
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2021 12:16:21 PM	B74578
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/12/2021 12:16:21 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS04-B

Project: Chaco 404H

Collection Date: 1/11/2021 1:04:00 PM

Lab ID: 2101385-002

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	430	60		mg/Kg	20	1/12/2021 4:53:41 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/12/2021 11:05:41 AM	57477
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2021 11:05:41 AM	57477
Surr: DNOP	98.7	30.4-154		%Rec	1	1/12/2021 11:05:41 AM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2021 1:27:06 PM	G74578
Surr: BFB	103	75.3-105		%Rec	1	1/12/2021 1:27:06 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2021 1:27:06 PM	B74578
Toluene	ND	0.050		mg/Kg	1	1/12/2021 1:27:06 PM	B74578
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2021 1:27:06 PM	B74578
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2021 1:27:06 PM	B74578
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/12/2021 1:27:06 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS05

Project: Chaco 404H

Collection Date: 1/11/2021 1:11:00 PM

Lab ID: 2101385-003

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	550	59		mg/Kg	20	1/12/2021 5:06:05 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	1/12/2021 11:29:49 AM	57477
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/12/2021 11:29:49 AM	57477
Surr: DNOP	101	30.4-154		%Rec	1	1/12/2021 11:29:49 AM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2021 2:38:08 PM	G74578
Surr: BFB	106	75.3-105	S	%Rec	1	1/12/2021 2:38:08 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/12/2021 2:38:08 PM	B74578
Toluene	ND	0.050		mg/Kg	1	1/12/2021 2:38:08 PM	B74578
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2021 2:38:08 PM	B74578
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2021 2:38:08 PM	B74578
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	1/12/2021 2:38:08 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS06

Project: Chaco 404H

Collection Date: 1/11/2021 1:15:00 PM

Lab ID: 2101385-004

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	900	60		mg/Kg	20	1/12/2021 5:18:30 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/12/2021 11:53:47 AM	57477
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/12/2021 11:53:47 AM	57477
Surr: DNOP	101	30.4-154		%Rec	1	1/12/2021 11:53:47 AM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	1/12/2021 3:48:43 PM	G74578
Surr: BFB	99.3	75.3-105		%Rec	1	1/12/2021 3:48:43 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	1/12/2021 3:48:43 PM	B74578
Toluene	ND	0.044		mg/Kg	1	1/12/2021 3:48:43 PM	B74578
Ethylbenzene	ND	0.044		mg/Kg	1	1/12/2021 3:48:43 PM	B74578
Xylenes, Total	ND	0.089		mg/Kg	1	1/12/2021 3:48:43 PM	B74578
Surr: 4-Bromofluorobenzene	97.6	80-120		%Rec	1	1/12/2021 3:48:43 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS07

Project: Chaco 404H

Collection Date: 1/11/2021 1:27:00 PM

Lab ID: 2101385-005

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	560	60		mg/Kg	20	1/12/2021 5:30:55 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/12/2021 12:17:40 PM	57477
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 12:17:40 PM	57477
Surr: DNOP	98.4	30.4-154		%Rec	1	1/12/2021 12:17:40 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2021 4:12:09 PM	G74578
Surr: BFB	102	75.3-105		%Rec	1	1/12/2021 4:12:09 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	1/12/2021 4:12:09 PM	B74578
Toluene	ND	0.049		mg/Kg	1	1/12/2021 4:12:09 PM	B74578
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2021 4:12:09 PM	B74578
Xylenes, Total	ND	0.098		mg/Kg	1	1/12/2021 4:12:09 PM	B74578
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/12/2021 4:12:09 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS08

Project: Chaco 404H

Collection Date: 1/11/2021 1:36:00 PM

Lab ID: 2101385-006

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	280	60		mg/Kg	20	1/12/2021 5:43:20 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/12/2021 12:41:35 PM	57477
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 12:41:35 PM	57477
Surr: DNOP	100	30.4-154		%Rec	1	1/12/2021 12:41:35 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	1/12/2021 4:35:49 PM	G74578
Surr: BFB	104	75.3-105		%Rec	1	1/12/2021 4:35:49 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.026		mg/Kg	1	1/12/2021 4:35:49 PM	B74578
Toluene	ND	0.053		mg/Kg	1	1/12/2021 4:35:49 PM	B74578
Ethylbenzene	ND	0.053		mg/Kg	1	1/12/2021 4:35:49 PM	B74578
Xylenes, Total	ND	0.11		mg/Kg	1	1/12/2021 4:35:49 PM	B74578
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/12/2021 4:35:49 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS09

Project: Chaco 404H

Collection Date: 1/11/2021 1:42:00 PM

Lab ID: 2101385-007

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	480	59		mg/Kg	20	1/12/2021 5:55:45 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/12/2021 1:05:37 PM	57477
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/12/2021 1:05:37 PM	57477
Surr: DNOP	101	30.4-154		%Rec	1	1/12/2021 1:05:37 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/12/2021 4:59:19 PM	G74578
Surr: BFB	101	75.3-105		%Rec	1	1/12/2021 4:59:19 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	1/12/2021 4:59:19 PM	B74578
Toluene	ND	0.036		mg/Kg	1	1/12/2021 4:59:19 PM	B74578
Ethylbenzene	ND	0.036		mg/Kg	1	1/12/2021 4:59:19 PM	B74578
Xylenes, Total	ND	0.073		mg/Kg	1	1/12/2021 4:59:19 PM	B74578
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	1/12/2021 4:59:19 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW04

Project: Chaco 404H

Collection Date: 1/11/2021 1:45:00 PM

Lab ID: 2101385-008

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	77	60		mg/Kg	20	1/12/2021 6:08:09 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/12/2021 1:29:32 PM	57477
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2021 1:29:32 PM	57477
Surr: DNOP	86.2	30.4-154		%Rec	1	1/12/2021 1:29:32 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	1/12/2021 5:22:55 PM	G74578
Surr: BFB	103	75.3-105		%Rec	1	1/12/2021 5:22:55 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	1/12/2021 5:22:55 PM	B74578
Toluene	ND	0.045		mg/Kg	1	1/12/2021 5:22:55 PM	B74578
Ethylbenzene	ND	0.045		mg/Kg	1	1/12/2021 5:22:55 PM	B74578
Xylenes, Total	ND	0.089		mg/Kg	1	1/12/2021 5:22:55 PM	B74578
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/12/2021 5:22:55 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS10

Project: Chaco 404H

Collection Date: 1/11/2021 2:57:00 PM

Lab ID: 2101385-009

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	160	61		mg/Kg	20	1/12/2021 6:20:34 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/12/2021 1:53:36 PM	57477
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/12/2021 1:53:36 PM	57477
Surr: DNOP	93.2	30.4-154		%Rec	1	1/12/2021 1:53:36 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	1/12/2021 5:46:20 PM	G74578
Surr: BFB	101	75.3-105		%Rec	1	1/12/2021 5:46:20 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	1/12/2021 5:46:20 PM	B74578
Toluene	ND	0.039		mg/Kg	1	1/12/2021 5:46:20 PM	B74578
Ethylbenzene	ND	0.039		mg/Kg	1	1/12/2021 5:46:20 PM	B74578
Xylenes, Total	ND	0.078		mg/Kg	1	1/12/2021 5:46:20 PM	B74578
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/12/2021 5:46:20 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS11

Project: Chaco 404H

Collection Date: 1/11/2021 3:01:00 PM

Lab ID: 2101385-010

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	480	60		mg/Kg	20	1/12/2021 6:32:58 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	22	9.1		mg/Kg	1	1/12/2021 2:17:33 PM	57477
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/12/2021 2:17:33 PM	57477
Surr: DNOP	98.3	30.4-154		%Rec	1	1/12/2021 2:17:33 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/12/2021 6:09:49 PM	G74578
Surr: BFB	103	75.3-105		%Rec	1	1/12/2021 6:09:49 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	1/12/2021 6:09:49 PM	B74578
Toluene	ND	0.038		mg/Kg	1	1/12/2021 6:09:49 PM	B74578
Ethylbenzene	ND	0.038		mg/Kg	1	1/12/2021 6:09:49 PM	B74578
Xylenes, Total	ND	0.076		mg/Kg	1	1/12/2021 6:09:49 PM	B74578
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	1/12/2021 6:09:49 PM	B74578

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

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



## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS15

Project: Chaco 404H

Collection Date: 1/11/2021 4:45:00 PM

Lab ID: 2101385-011

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/12/2021 6:45:23 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/12/2021 2:41:37 PM	57477
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/12/2021 2:41:37 PM	57477
Surr: DNOP	98.1	30.4-154		%Rec	1	1/12/2021 2:41:37 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	1/12/2021 6:33:19 PM	G74578
Surr: BFB	102	75.3-105		%Rec	1	1/12/2021 6:33:19 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	1/12/2021 6:33:19 PM	B74578
Toluene	ND	0.039		mg/Kg	1	1/12/2021 6:33:19 PM	B74578
Ethylbenzene	ND	0.039		mg/Kg	1	1/12/2021 6:33:19 PM	B74578
Xylenes, Total	ND	0.077		mg/Kg	1	1/12/2021 6:33:19 PM	B74578
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	1/12/2021 6:33:19 PM	B74578

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

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

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## Analytical Report

Lab Order 2101385

Date Reported: 1/14/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW06

Project: Chaco 404H

Collection Date: 1/11/2021 4:49:00 PM

Lab ID: 2101385-012

Matrix: MEOH (SOIL)

Received Date: 1/12/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/12/2021 7:22:36 PM	57497
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/12/2021 3:05:41 PM	57477
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/12/2021 3:05:41 PM	57477
Surr: DNOP	93.4	30.4-154		%Rec	1	1/12/2021 3:05:41 PM	57477
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/12/2021 6:56:46 PM	G74578
Surr: BFB	101	75.3-105		%Rec	1	1/12/2021 6:56:46 PM	G74578
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.017		mg/Kg	1	1/12/2021 6:56:46 PM	B74578
Toluene	ND	0.035		mg/Kg	1	1/12/2021 6:56:46 PM	B74578
Ethylbenzene	ND	0.035		mg/Kg	1	1/12/2021 6:56:46 PM	B74578
Xylenes, Total	ND	0.070		mg/Kg	1	1/12/2021 6:56:46 PM	B74578
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	1/12/2021 6:56:46 PM	B74578

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

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

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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>MB-57497</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57497</b>	RunNo: <b>74580</b>								
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>	SeqNo: <b>2632348</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57497</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57497</b>	RunNo: <b>74580</b>								
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>	SeqNo: <b>2632349</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

**Qualifiers:**

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

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



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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>LCS-57448</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>57448</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/11/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2631924</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		117	30.4	154			

Sample ID: <b>LCS-57477</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>57477</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2631925</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.6	68.9	141			
Surr: DNOP	4.7		5.000		94.2	30.4	154			

Sample ID: <b>MB-57448</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>57448</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/11/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2631926</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		125	30.4	154			

Sample ID: <b>MB-57477</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>57477</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2631927</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.3	30.4	154			

Sample ID: <b>2101385-001AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>FS03-B</b>	Batch ID: <b>57477</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2633013</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.31	0	103	15	184			
Surr: DNOP	4.6		4.831		96.0	30.4	154			

Sample ID: <b>2101385-001AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>FS03-B</b>	Batch ID: <b>57477</b>			RunNo: <b>74564</b>						
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2633014</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.7	48.64	0	101	15	184	0.749	23.9	

**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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>2101385-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>FS03-B</b>	Batch ID: <b>57477</b>	RunNo: <b>74564</b>								
Prep Date: <b>1/12/2021</b>	Analysis Date: <b>1/12/2021</b>	SeqNo: <b>2633014</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		4.864		94.7	30.4	154	0	0	

Sample ID: <b>LCS-57446</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57446</b>	RunNo: <b>74564</b>								
Prep Date: <b>1/11/2021</b>	Analysis Date: <b>1/12/2021</b>	SeqNo: <b>2633015</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		110	30.4	154			

Sample ID: <b>MB-57446</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57446</b>	RunNo: <b>74564</b>								
Prep Date: <b>1/11/2021</b>	Analysis Date: <b>1/12/2021</b>	SeqNo: <b>2633016</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	30.4	154			

**Qualifiers:**

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

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



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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G74578</b>		RunNo: <b>74578</b>							
Prep Date:	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632222</b>		Units: <b>mg/Kg</b>					
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		102	75.3	105			

Sample ID: <b>2.5UG GRO LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G74578</b>		RunNo: <b>74578</b>							
Prep Date:	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632223</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.5	106			
Surr: BFB	1200		1000		119	75.3	105			S

Sample ID: <b>2101385-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>FS03-B</b>	Batch ID: <b>G74578</b>		RunNo: <b>74578</b>							
Prep Date:	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632243</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.1	25.28	0	95.0	61.3	114			
Surr: BFB	1200		1011		115	75.3	105			S

Sample ID: <b>2101385-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>FS03-B</b>	Batch ID: <b>G74578</b>		RunNo: <b>74578</b>							
Prep Date:	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632244</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.1	25.28	0	102	61.3	114	6.91	20	
Surr: BFB	1200		1011		118	75.3	105	0	0	S

Sample ID: <b>mb-57440</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>57440</b>		RunNo: <b>74578</b>							
Prep Date: <b>1/10/2021</b>	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632245</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		105	75.3	105			

Sample ID: <b>lcs-57440</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>57440</b>		RunNo: <b>74578</b>							
Prep Date: <b>1/10/2021</b>	Analysis Date: <b>1/12/2021</b>		SeqNo: <b>2632246</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	75.3	105			S

**Qualifiers:**

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

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

Page 16 of 18



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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>B74578</b>			RunNo: <b>74578</b>						
Prep Date:	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2632269</b>		Units: <b>mg/Kg</b>				
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	0.99		1.000		98.8	80	120			

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>B74578</b>			RunNo: <b>74578</b>						
Prep Date:	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2632270</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.2	80	120			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID: <b>2101385-002AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>FS04-B</b>	Batch ID: <b>B74578</b>			RunNo: <b>74578</b>						
Prep Date:	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2632290</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	0.9911	0	96.0	76.3	120			
Toluene	0.96	0.050	0.9911	0	96.5	78.5	120			
Ethylbenzene	0.96	0.050	0.9911	0	96.4	78.1	124			
Xylenes, Total	2.9	0.099	2.973	0	97.0	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9911		105	80	120			

Sample ID: <b>2101385-002AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>FS04-B</b>	Batch ID: <b>B74578</b>			RunNo: <b>74578</b>						
Prep Date:	Analysis Date: <b>1/12/2021</b>			SeqNo: <b>2632291</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	0.9911	0	95.6	76.3	120	0.407	20	
Toluene	0.96	0.050	0.9911	0	97.0	78.5	120	0.486	20	
Ethylbenzene	0.96	0.050	0.9911	0	97.0	78.1	124	0.621	20	
Xylenes, Total	2.9	0.099	2.973	0	96.9	79.3	125	0.0722	20	
Surr: 4-Bromofluorobenzene	1.1		0.9911		107	80	120	0	0	

**Qualifiers:**

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

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



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

WO#: 2101385

14-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb-57440</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>PBS</b>	Batch ID: <b>57440</b>				RunNo: <b>74578</b>					
Prep Date: <b>1/10/2021</b>	Analysis Date: <b>1/12/2021</b>				SeqNo: <b>2632292</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

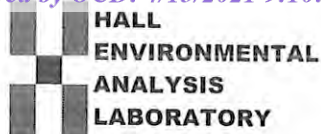
Sample ID: <b>LCS-57440</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8021B: Volatiles</b>					
Client ID: <b>LCSS</b>	Batch ID: <b>57440</b>				RunNo: <b>74578</b>					
Prep Date: <b>1/10/2021</b>	Analysis Date: <b>1/12/2021</b>				SeqNo: <b>2632293</b>	Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		105	80	120			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **Enduring Resources**Work Order Number: **2101385**RcptNo: **1**Received By: **Isaiah Ortiz**

1/12/2021 7:50:00 AM

I-OK

Completed By: **Isaiah Ortiz**

1/12/2021 8:09:04 AM

I-OK

Reviewed By:

JR 1/12/21

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SCL 1/12/21

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes			



Client: Enduring Resources

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC      ☐ Other

☒ EDD (Type) PDF

Turn-Around Time:

☐ Standard ☒ Rush Next day

Project Name:
---------------

Chaco 404 H

Project #:
------------

Project Manager:

Stuart Hyde

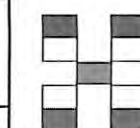
Sampler: C. McGinn

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF):  $08^{\circ}\text{C} \pm 0^{\circ}\text{C}$  ( $^{\circ}\text{C}$ )Container  
Type and #Preservative  
Type

HEAL No.  
2101385



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Date: 11/21	Time: 1833	Relinquished by: [Signature]	Received by: [Signature]	Via: [Signature]	Date: 11/21	Time: 1833
Date: 11/21	Time: 1914	Relinquished by: [Signature]	Received by: [Signature]	Via: [Signature]	Date: 11/21	Time: 0750

Remarks:  
cc: stuart.hyde@wsp.com  
caitlin.mcginn@wsp.com





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

January 18, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX:

RE: Chaco 404 H

OrderNo.: 2101587

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/15/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2101587

Date Reported: 1/18/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS06-B

Project: Chaco 404 H

Collection Date: 1/14/2021 11:58:00 AM

Lab ID: 2101587-001

Matrix: SOIL

Received Date: 1/15/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: VP
Chloride	440	61		mg/Kg	20	1/15/2021 12:09:43 PM	57558

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

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

Page 1 of 2



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

WO#: 2101587

18-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>MB-57558</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57558</b>	RunNo: <b>74648</b>								
Prep Date: <b>1/15/2021</b>	Analysis Date: <b>1/15/2021</b>	SeqNo: <b>2635328</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57558</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57558</b>	RunNo: <b>74648</b>								
Prep Date: <b>1/15/2021</b>	Analysis Date: <b>1/15/2021</b>	SeqNo: <b>2635329</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

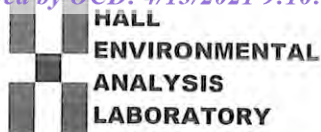
**Qualifiers:**

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

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

Page 2 of 2





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

## Sample Log-In Check List

Client Name: **Enduring Resources**Work Order Number: **2101587**

RcptNo: 1

Received By: **Isaiah Ortiz**

1/15/2021 7:52:00 AM

I-OK

Completed By: **Isaiah Ortiz**

1/15/2021 8:01:21 AM

I-OK

Reviewed By:

JR 1/15/21

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: SGL 1/15/21

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			



Released to Imaging: 3/28/2022 11:13:12 AM

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC      ☐ Other \_\_\_\_\_

☒ EDD (Type) PDF

Turn-Around Time:

☐ Standard ☒ Rush Same day

Project Name:

Chaco 404-H

Project #:

Project Manager:

Stuart Hyde

Sampler: C. McGinn

On Ice: ☒ Yes ☐ No

# of Coolers:

Cooler Temp (including CF):  $23^{\circ}\text{C} \pm 0$  ( $^{\circ}\text{C}$ )[illegible]Preservative  
Type

HEAL No.  
2101587

1402 jar

cool

- 001

BTEX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl), F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VQA)

Total Coliform (Present/Absent)

1000

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1. ☐ 2. ☐ 3. ☐ 4. ☐ 5. ☐ 6. ☐ 7. ☐ 8. ☐ 9. ☐ 10. ☐ 11. ☐ 12. ☐ 13. ☐ 14. ☐ 15. ☐ 16. ☐ 17. ☐ 18. ☐ 19. ☐ 20. ☐ 21. ☐ 22. ☐ 23. ☐ 24. ☐ 25. ☐ 26. ☐ 27. ☐ 28. ☐ 29. ☐ 30. ☐ 31. ☐ 32. ☐ 33. ☐ 34. ☐ 35. ☐ 36. ☐ 37. ☐ 38. ☐ 39. ☐ 40. ☐ 41. ☐ 42. ☐ 43. ☐ 44. ☐ 45. ☐ 46. ☐ 47. ☐ 48. ☐ 49. ☐ 50. ☐ 51. ☐ 52. ☐ 53. ☐ 54. ☐ 55. ☐ 56. ☐ 57. ☐ 58. ☐ 59. ☐ 60. ☐ 61. ☐ 62. ☐ 63. ☐ 64. ☐ 65. ☐ 66. ☐ 67. ☐ 68. ☐ 69. ☐ 70. ☐ 71. ☐ 72. ☐ 73. ☐ 74. ☐ 75. ☐ 76. ☐ 77. ☐ 78. ☐ 79. ☐ 80. ☐ 81. ☐ 82. ☐ 83. ☐ 84. ☐ 85. ☐ 86. ☐ 87. ☐ 88. ☐ 89. ☐ 90. ☐ 91. ☐ 92. ☐ 93. ☐ 94. ☐ 95. ☐ 96. ☐ 97. ☐ 98. ☐ 99. ☐ 100. ☐

10:25 AM

Date: 1/14/21	Time: 1400	Relinquished by: Caitlin Meers	Received by: Chris Wast	Via:	Date 1/14/21	Time 1400
Date: 1/14/21	Time: 1754	Relinquished by: Christine Waller	Received by: Erin Collins	Via:	Date 1/15/21	Time 0752

Remarks:  
Cc: Stuart.hyde@wsp.com  
carlin.mcginn@wsp.com





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

January 28, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX:

RE: Chaco 404H

OrderNo.: 2101830

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 13 sample(s) on 1/22/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS12

Project: Chaco 404H

Collection Date: 1/21/2021 3:43:00 PM

Lab ID: 2101830-001

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	310	60		mg/Kg	20	1/22/2021 7:55:14 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/25/2021 9:38:37 AM	57700
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2021 9:38:37 AM	57700
Surr: DNOP	84.9	30.4-154		%Rec	1	1/25/2021 9:38:37 AM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 2:13:19 AM	57694
Surr: BFB	95.5	75.3-105		%Rec	1	1/24/2021 2:13:19 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 2:13:19 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 2:13:19 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 2:13:19 AM	57694
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2021 2:13:19 AM	57694
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	1/24/2021 2:13:19 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS13

Project: Chaco 404H

Collection Date: 1/21/2021 3:44:00 PM

Lab ID: 2101830-002

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	82	60		mg/Kg	20	1/22/2021 8:07:38 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/25/2021 11:13:12 AM	57700
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2021 11:13:12 AM	57700
Surr: DNOP	92.4	30.4-154		%Rec	1	1/25/2021 11:13:12 AM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 3:24:04 AM	57694
Surr: BFB	97.0	75.3-105		%Rec	1	1/24/2021 3:24:04 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	1/24/2021 3:24:04 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 3:24:04 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 3:24:04 AM	57694
Xylenes, Total	ND	0.098		mg/Kg	1	1/24/2021 3:24:04 AM	57694
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	1/24/2021 3:24:04 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS14

Project: Chaco 404H

Collection Date: 1/21/2021 3:45:00 PM

Lab ID: 2101830-003

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 8:20:03 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/25/2021 11:36:50 AM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 11:36:50 AM	57700
Surr: DNOP	92.8	30.4-154		%Rec	1	1/25/2021 11:36:50 AM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 4:34:58 AM	57694
Surr: BFB	96.9	75.3-105		%Rec	1	1/24/2021 4:34:58 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 4:34:58 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 4:34:58 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 4:34:58 AM	57694
Xylenes, Total	ND	0.098		mg/Kg	1	1/24/2021 4:34:58 AM	57694
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	1/24/2021 4:34:58 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS16

Project: Chaco 404H

Collection Date: 1/21/2021 3:46:00 PM

Lab ID: 2101830-004

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 8:32:28 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/25/2021 12:00:28 PM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 12:00:28 PM	57700
Surr: DNOP	93.2	30.4-154		%Rec	1	1/25/2021 12:00:28 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 4:58:45 AM	57694
Surr: BFB	97.4	75.3-105		%Rec	1	1/24/2021 4:58:45 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 4:58:45 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 4:58:45 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 4:58:45 AM	57694
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2021 4:58:45 AM	57694
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	1/24/2021 4:58:45 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS17

Project: Chaco 404H

Collection Date: 1/21/2021 3:49:00 PM

Lab ID: 2101830-005

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 8:44:53 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/25/2021 12:24:10 PM	57700
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2021 12:24:10 PM	57700
Surr: DNOP	93.6	30.4-154		%Rec	1	1/25/2021 12:24:10 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 5:22:21 AM	57694
Surr: BFB	96.7	75.3-105		%Rec	1	1/24/2021 5:22:21 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 5:22:21 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 5:22:21 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 5:22:21 AM	57694
Xylenes, Total	ND	0.10		mg/Kg	1	1/24/2021 5:22:21 AM	57694
Surr: 4-Bromofluorobenzene	99.5	80-120		%Rec	1	1/24/2021 5:22:21 AM	57694

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

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

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## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS18

Project: Chaco 404H

Collection Date: 1/21/2021 3:50:00 PM

Lab ID: 2101830-006

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	230	60		mg/Kg	20	1/22/2021 8:57:17 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/25/2021 12:47:49 PM	57700
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/25/2021 12:47:49 PM	57700
Surr: DNOP	95.9	30.4-154		%Rec	1	1/25/2021 12:47:49 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 5:45:51 AM	57694
Surr: BFB	93.8	75.3-105		%Rec	1	1/24/2021 5:45:51 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 5:45:51 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 5:45:51 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 5:45:51 AM	57694
Xylenes, Total	ND	0.10		mg/Kg	1	1/24/2021 5:45:51 AM	57694
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	1/24/2021 5:45:51 AM	57694

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

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

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## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS19

Project: Chaco 404H

Collection Date: 1/21/2021 3:52:00 PM

Lab ID: 2101830-007

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	84	61		mg/Kg	20	1/22/2021 9:09:41 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/25/2021 1:11:29 PM	57700
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2021 1:11:29 PM	57700
Surr: DNOP	95.3	30.4-154		%Rec	1	1/25/2021 1:11:29 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 6:09:35 AM	57694
Surr: BFB	96.1	75.3-105		%Rec	1	1/24/2021 6:09:35 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 6:09:35 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 6:09:35 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 6:09:35 AM	57694
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2021 6:09:35 AM	57694
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	1/24/2021 6:09:35 AM	57694

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

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

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## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS20

Project: Chaco 404H

Collection Date: 1/21/2021 3:54:00 PM

Lab ID: 2101830-008

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	200	60		mg/Kg	20	1/22/2021 9:22:07 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/25/2021 1:35:13 PM	57700
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/25/2021 1:35:13 PM	57700
Surr: DNOP	95.0	30.4-154		%Rec	1	1/25/2021 1:35:13 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 6:33:04 AM	57694
Surr: BFB	94.7	75.3-105		%Rec	1	1/24/2021 6:33:04 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	1/24/2021 6:33:04 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 6:33:04 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 6:33:04 AM	57694
Xylenes, Total	ND	0.098		mg/Kg	1	1/24/2021 6:33:04 AM	57694
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	1/24/2021 6:33:04 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS21

Project: Chaco 404H

Collection Date: 1/21/2021 3:56:00 PM

Lab ID: 2101830-009

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 9:59:20 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/25/2021 1:58:55 PM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 1:58:55 PM	57700
Surr: DNOP	96.1	30.4-154		%Rec	1	1/25/2021 1:58:55 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 6:57:13 AM	57694
Surr: BFB	94.2	75.3-105		%Rec	1	1/24/2021 6:57:13 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 6:57:13 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 6:57:13 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 6:57:13 AM	57694
Xylenes, Total	ND	0.10		mg/Kg	1	1/24/2021 6:57:13 AM	57694
Surr: 4-Bromofluorobenzene	96.4	80-120		%Rec	1	1/24/2021 6:57:13 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS22

Project: Chaco 404H

Collection Date: 1/21/2021 3:58:00 PM

Lab ID: 2101830-010

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 10:11:44 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/25/2021 2:22:34 PM	57700
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/25/2021 2:22:34 PM	57700
Surr: DNOP	96.1	30.4-154		%Rec	1	1/25/2021 2:22:34 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 7:20:47 AM	57694
Surr: BFB	96.4	75.3-105		%Rec	1	1/24/2021 7:20:47 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 7:20:47 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 7:20:47 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 7:20:47 AM	57694
Xylenes, Total	ND	0.10		mg/Kg	1	1/24/2021 7:20:47 AM	57694
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	1/24/2021 7:20:47 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS23

Project: Chaco 404H

Collection Date: 1/21/2021 4:01:00 PM

Lab ID: 2101830-011

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 10:24:08 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	25	9.6		mg/Kg	1	1/25/2021 2:46:16 PM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 2:46:16 PM	57700
Surr: DNOP	95.2	30.4-154		%Rec	1	1/25/2021 2:46:16 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/24/2021 8:31:32 AM	57694
Surr: BFB	95.6	75.3-105		%Rec	1	1/24/2021 8:31:32 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 8:31:32 AM	57694
Toluene	ND	0.050		mg/Kg	1	1/24/2021 8:31:32 AM	57694
Ethylbenzene	ND	0.050		mg/Kg	1	1/24/2021 8:31:32 AM	57694
Xylenes, Total	ND	0.099		mg/Kg	1	1/24/2021 8:31:32 AM	57694
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	1/24/2021 8:31:32 AM	57694

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

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



## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS24

Project: Chaco 404H

Collection Date: 1/21/2021 4:03:00 PM

Lab ID: 2101830-012

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 10:36:33 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/25/2021 3:10:01 PM	57700
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/25/2021 3:10:01 PM	57700
Surr: DNOP	97.4	30.4-154		%Rec	1	1/25/2021 3:10:01 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 8:55:32 AM	57694
Surr: BFB	94.6	75.3-105		%Rec	1	1/24/2021 8:55:32 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 8:55:32 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 8:55:32 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 8:55:32 AM	57694
Xylenes, Total	ND	0.098		mg/Kg	1	1/24/2021 8:55:32 AM	57694
Surr: 4-Bromofluorobenzene	96.6	80-120		%Rec	1	1/24/2021 8:55:32 AM	57694

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

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

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## Analytical Report

Lab Order 2101830

Date Reported: 1/28/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW07

Project: Chaco 404H

Collection Date: 1/21/2021 4:04:00 PM

Lab ID: 2101830-013

Matrix: SOIL

Received Date: 1/22/2021 8:23:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/22/2021 10:48:58 PM	57697
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/25/2021 3:33:41 PM	57700
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/25/2021 3:33:41 PM	57700
Surr: DNOP	95.5	30.4-154		%Rec	1	1/25/2021 3:33:41 PM	57700
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/24/2021 9:19:05 AM	57694
Surr: BFB	95.5	75.3-105		%Rec	1	1/24/2021 9:19:05 AM	57694
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	1/24/2021 9:19:05 AM	57694
Toluene	ND	0.049		mg/Kg	1	1/24/2021 9:19:05 AM	57694
Ethylbenzene	ND	0.049		mg/Kg	1	1/24/2021 9:19:05 AM	57694
Xylenes, Total	ND	0.098		mg/Kg	1	1/24/2021 9:19:05 AM	57694
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	1/24/2021 9:19:05 AM	57694

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

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



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

WO#: 2101830

28-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>MB-57697</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57697</b>	RunNo: <b>74811</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640290</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57697</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57697</b>	RunNo: <b>74811</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/22/2021</b>	SeqNo: <b>2640291</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

**Qualifiers:**

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

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

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

WO#: 2101830

28-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>MB-57700</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57700</b>	RunNo: <b>74844</b>								
Prep Date: <b>1/23/2021</b>	Analysis Date: <b>1/25/2021</b>	SeqNo: <b>2641559</b> Units: <b>mg/Kg</b>								
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	10		10.00		101	30.4	154			

Sample ID: <b>LCS-57700</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57700</b>	RunNo: <b>74844</b>								
Prep Date: <b>1/23/2021</b>	Analysis Date: <b>1/25/2021</b>	SeqNo: <b>2641560</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.6	68.9	141			
Surr: DNOP	4.4		5.000		88.4	30.4	154			

Sample ID: <b>2101830-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>FS12</b>	Batch ID: <b>57700</b>	RunNo: <b>74844</b>								
Prep Date: <b>1/23/2021</b>	Analysis Date: <b>1/25/2021</b>	SeqNo: <b>2641561</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.6	47.76	0	100	15	184			
Surr: DNOP	4.5		4.776		93.6	30.4	154			

Sample ID: <b>2101830-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>FS12</b>	Batch ID: <b>57700</b>	RunNo: <b>74844</b>								
Prep Date: <b>1/23/2021</b>	Analysis Date: <b>1/25/2021</b>	SeqNo: <b>2641562</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.7	48.50	0	100	15	184	1.59	23.9	
Surr: DNOP	4.6		4.850		94.9	30.4	154	0	0	

Sample ID: <b>LCS-57717</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57717</b>	RunNo: <b>74840</b>								
Prep Date: <b>1/25/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2641647</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		101	30.4	154			

Sample ID: <b>MB-57717</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57717</b>	RunNo: <b>74840</b>								
Prep Date: <b>1/25/2021</b>	Analysis Date: <b>1/26/2021</b>	SeqNo: <b>2641649</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2101830  
28-Jan-21

Client: Enduring Resources  
Project: Chaco 404H

Sample ID: MB-57717	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 57717	RunNo: 74840								
Prep Date: 1/25/2021	Analysis Date: 1/26/2021	SeqNo: 2641649		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	30.4	154			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

WO#: 2101830

28-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb-57694</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640378</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.5	75.3	105			

Sample ID: <b>lcs-57694</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640379</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.7	80	120			
Surr: BFB	1100		1000		107	75.3	105			S

Sample ID: <b>2101830-002ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS13</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640382</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.93	0	92.4	61.3	114			
Surr: BFB	1100		997.0		106	75.3	105			S

Sample ID: <b>2101830-002amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>FS13</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640383</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.85	0	93.8	61.3	114	1.16	20	
Surr: BFB	1100		994.0		107	75.3	105	0	0	S

**Qualifiers:**

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

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



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

WO#: 2101830

28-Jan-21

**Client:** Enduring Resources**Project:** Chaco 404H

Sample ID: <b>mb-57694</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640429</b>		Units: <b>mg/Kg</b>						
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	0.97		1.000		97.1	80	120			

Sample ID: <b>LCS-57694</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640430</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.0	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: <b>2101830-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS12</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640432</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9747	0	93.2	76.3	120			
Toluene	0.93	0.049	0.9747	0	95.6	78.5	120			
Ethylbenzene	0.93	0.049	0.9747	0	95.4	78.1	124			
Xylenes, Total	2.8	0.097	2.924	0	94.9	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9747		100	80	120			

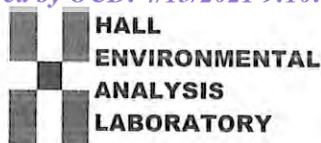
Sample ID: <b>2101830-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS12</b>	Batch ID: <b>57694</b>	RunNo: <b>74814</b>								
Prep Date: <b>1/22/2021</b>	Analysis Date: <b>1/24/2021</b>	SeqNo: <b>2640433</b>		Units: <b>mg/Kg</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9852	0	95.7	76.3	120	3.80	20	
Toluene	0.96	0.049	0.9852	0	97.8	78.5	120	3.29	20	
Ethylbenzene	0.96	0.049	0.9852	0	97.3	78.1	124	2.99	20	
Xylenes, Total	2.9	0.099	2.956	0	97.2	79.3	125	3.52	20	
Surr: 4-Bromofluorobenzene	0.97		0.9852		98.3	80	120	0	0	

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: Enduring Resources

Work Order Number: 2101830

RcptNo: 1

Received By: Cheyenne Cason 1/22/2021 8:23:00 AM

Completed By: Erin Melendrez 1/22/2021 8:56:59 AM

Reviewed By: JR 1/22/21

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: ENM 1/22/21

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			



## Chain-of-Custody Record

Client: Enduring Resources

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☒ EDD (Type) PDF

Turn-Around Time: Verbal by 1/26/21

☐ Standard ☒ Rush

Project Name: Chaco 404 H

Project #:

Project Manager: Stuart Hyde

Sampler: C. McGinn

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): -0.1 + 0.2 = 0.1 (°C)

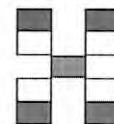
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1-21-21	1543	Soil	FS12	14oz jar	cool	-001
1	1544		FS13			-002
	1545		FS14			-003
	1546		FS16			-004
	1549		FS17			-005
	1550		FS18			-006
	1552		FS19			-007
	1554		FS20			-008
	1556		FS21			-009
	1558		FS22			-010
	1601		FS23			-011
	1603		FS24			-012

Date: 1-21-21 Time: 1655 Relinquished by: Caitlin McGinn

Date: 1/21/21 Time: 1810 Relinquished by: Christine Warden

Received by: Chad Wait Via:  Date: 1/21/21 Time: 1655

Received by: Cecilia Via:  Date: 1/24/21 Time: 0823



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)										
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													
X	X					X													

Remarks: cc: Stuart.Hyde@wsp.com  
Caitlin.McGinn@wsp.com









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

February 12, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX:

RE: Chaco 404 H

OrderNo.: 2102429

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 13 sample(s) on 2/9/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS38

Project: Chaco 404 H

Collection Date: 2/8/2021 1:12:00 PM

Lab ID: 2102429-001

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	69	60		mg/Kg	20	2/9/2021 10:58:38 AM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/9/2021 9:54:04 AM	57995
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/9/2021 9:54:04 AM	57995
Surr: DNOP	106	70-130		%Rec	1	2/9/2021 9:54:04 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	2/9/2021 9:36:25 AM	G75165
Surr: BFB	106	75.3-105	S	%Rec	1	2/9/2021 9:36:25 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	2/9/2021 9:36:25 AM	B75165
Toluene	ND	0.044		mg/Kg	1	2/9/2021 9:36:25 AM	B75165
Ethylbenzene	ND	0.044		mg/Kg	1	2/9/2021 9:36:25 AM	B75165
Xylenes, Total	ND	0.088		mg/Kg	1	2/9/2021 9:36:25 AM	B75165
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	2/9/2021 9:36:25 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS39

Project: Chaco 404 H

Collection Date: 2/8/2021 1:14:00 PM

Lab ID: 2102429-002

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	85	60		mg/Kg	20	2/9/2021 11:11:03 AM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	11	9.7		mg/Kg	1	2/9/2021 10:03:34 AM	57995
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2021 10:03:34 AM	57995
Surr: DNOP	121	70-130		%Rec	1	2/9/2021 10:03:34 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	2/9/2021 10:00:03 AM	G75165
Surr: BFB	104	75.3-105		%Rec	1	2/9/2021 10:00:03 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	2/9/2021 10:00:03 AM	B75165
Toluene	ND	0.037		mg/Kg	1	2/9/2021 10:00:03 AM	B75165
Ethylbenzene	ND	0.037		mg/Kg	1	2/9/2021 10:00:03 AM	B75165
Xylenes, Total	ND	0.074		mg/Kg	1	2/9/2021 10:00:03 AM	B75165
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/9/2021 10:00:03 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS40

Project: Chaco 404 H

Collection Date: 2/8/2021 1:25:00 PM

Lab ID: 2102429-003

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	150	60		mg/Kg	20	2/9/2021 11:23:28 AM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	110	9.3		mg/Kg	1	2/9/2021 10:13:07 AM	57995
Motor Oil Range Organics (MRO)	77	47		mg/Kg	1	2/9/2021 10:13:07 AM	57995
Surr: DNOP	110	70-130		%Rec	1	2/9/2021 10:13:07 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/9/2021 10:23:38 AM	G75165
Surr: BFB	103	75.3-105		%Rec	5	2/9/2021 10:23:38 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.088		mg/Kg	5	2/9/2021 10:23:38 AM	B75165
Toluene	ND	0.18		mg/Kg	5	2/9/2021 10:23:38 AM	B75165
Ethylbenzene	ND	0.18		mg/Kg	5	2/9/2021 10:23:38 AM	B75165
Xylenes, Total	ND	0.35		mg/Kg	5	2/9/2021 10:23:38 AM	B75165
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	2/9/2021 10:23:38 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS41

Project: Chaco 404 H

Collection Date: 2/8/2021 1:27:00 PM

Lab ID: 2102429-004

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/9/2021 11:35:52 AM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	2/9/2021 10:22:40 AM	57995
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/9/2021 10:22:40 AM	57995
Surr: DNOP	113	70-130		%Rec	1	2/9/2021 10:22:40 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	2/9/2021 10:47:03 AM	G75165
Surr: BFB	107	75.3-105	S	%Rec	1	2/9/2021 10:47:03 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	2/9/2021 10:47:03 AM	B75165
Toluene	ND	0.041		mg/Kg	1	2/9/2021 10:47:03 AM	B75165
Ethylbenzene	ND	0.041		mg/Kg	1	2/9/2021 10:47:03 AM	B75165
Xylenes, Total	ND	0.083		mg/Kg	1	2/9/2021 10:47:03 AM	B75165
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	2/9/2021 10:47:03 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS42

Project: Chaco 404 H

Collection Date: 2/8/2021 1:36:00 PM

Lab ID: 2102429-005

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	70	60		mg/Kg	20	2/9/2021 11:48:16 AM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/9/2021 10:32:20 AM	57995
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/9/2021 10:32:20 AM	57995
Surr: DNOP	109	70-130		%Rec	1	2/9/2021 10:32:20 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	2/9/2021 11:10:36 AM	G75165
Surr: BFB	109	75.3-105	S	%Rec	1	2/9/2021 11:10:36 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	2/9/2021 11:10:36 AM	B75165
Toluene	ND	0.038		mg/Kg	1	2/9/2021 11:10:36 AM	B75165
Ethylbenzene	ND	0.038		mg/Kg	1	2/9/2021 11:10:36 AM	B75165
Xylenes, Total	ND	0.076		mg/Kg	1	2/9/2021 11:10:36 AM	B75165
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	2/9/2021 11:10:36 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS43

Project: Chaco 404 H

Collection Date: 2/8/2021 1:38:00 PM

Lab ID: 2102429-006

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	63	60		mg/Kg	20	2/9/2021 12:00:41 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/9/2021 10:42:01 AM	57995
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2021 10:42:01 AM	57995
Surr: DNOP	110	70-130		%Rec	1	2/9/2021 10:42:01 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/9/2021 11:34:05 AM	G75165
Surr: BFB	107	75.3-105	S	%Rec	1	2/9/2021 11:34:05 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	2/9/2021 11:34:05 AM	B75165
Toluene	ND	0.035		mg/Kg	1	2/9/2021 11:34:05 AM	B75165
Ethylbenzene	ND	0.035		mg/Kg	1	2/9/2021 11:34:05 AM	B75165
Xylenes, Total	ND	0.071		mg/Kg	1	2/9/2021 11:34:05 AM	B75165
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	2/9/2021 11:34:05 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: FS44

Project: Chaco 404 H

Collection Date: 2/8/2021 1:48:00 PM

Lab ID: 2102429-007

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	88	60		mg/Kg	20	2/9/2021 12:13:06 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	2/9/2021 10:51:43 AM	57995
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	2/9/2021 10:51:43 AM	57995
Surr: DNOP	109	70-130		%Rec	1	2/9/2021 10:51:43 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	2/9/2021 11:57:32 AM	G75165
Surr: BFB	108	75.3-105	S	%Rec	1	2/9/2021 11:57:32 AM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	2/9/2021 11:57:32 AM	B75165
Toluene	ND	0.037		mg/Kg	1	2/9/2021 11:57:32 AM	B75165
Ethylbenzene	ND	0.037		mg/Kg	1	2/9/2021 11:57:32 AM	B75165
Xylenes, Total	ND	0.075		mg/Kg	1	2/9/2021 11:57:32 AM	B75165
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	2/9/2021 11:57:32 AM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW14

Project: Chaco 404 H

Collection Date: 2/8/2021 1:50:00 PM

Lab ID: 2102429-008

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	160	60		mg/Kg	20	2/9/2021 12:25:31 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	17	9.2		mg/Kg	1	2/9/2021 11:01:25 AM	57995
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2021 11:01:25 AM	57995
Surr: DNOP	114	70-130		%Rec	1	2/9/2021 11:01:25 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	2/9/2021 12:20:56 PM	G75165
Surr: BFB	108	75.3-105	S	%Rec	1	2/9/2021 12:20:56 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	2/9/2021 12:20:56 PM	B75165
Toluene	ND	0.041		mg/Kg	1	2/9/2021 12:20:56 PM	B75165
Ethylbenzene	ND	0.041		mg/Kg	1	2/9/2021 12:20:56 PM	B75165
Xylenes, Total	ND	0.081		mg/Kg	1	2/9/2021 12:20:56 PM	B75165
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	2/9/2021 12:20:56 PM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW15

Project: Chaco 404 H

Collection Date: 2/8/2021 1:58:00 PM

Lab ID: 2102429-009

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	140	60		mg/Kg	20	2/9/2021 1:02:43 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/9/2021 11:11:08 AM	57995
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/9/2021 11:11:08 AM	57995
Surr: DNOP	115	70-130		%Rec	1	2/9/2021 11:11:08 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	2/9/2021 12:44:22 PM	G75165
Surr: BFB	105	75.3-105	S	%Rec	1	2/9/2021 12:44:22 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	2/9/2021 12:44:22 PM	B75165
Toluene	ND	0.039		mg/Kg	1	2/9/2021 12:44:22 PM	B75165
Ethylbenzene	ND	0.039		mg/Kg	1	2/9/2021 12:44:22 PM	B75165
Xylenes, Total	ND	0.078		mg/Kg	1	2/9/2021 12:44:22 PM	B75165
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	2/9/2021 12:44:22 PM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW16

Project: Chaco 404 H

Collection Date: 2/8/2021 2:01:00 PM

Lab ID: 2102429-010

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	160	61		mg/Kg	20	2/9/2021 1:15:07 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	2/9/2021 11:20:52 AM	57995
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/9/2021 11:20:52 AM	57995
Surr: DNOP	115	70-130		%Rec	1	2/9/2021 11:20:52 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	2/9/2021 1:07:42 PM	G75165
Surr: BFB	107	75.3-105	S	%Rec	1	2/9/2021 1:07:42 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	2/9/2021 1:07:42 PM	B75165
Toluene	ND	0.043		mg/Kg	1	2/9/2021 1:07:42 PM	B75165
Ethylbenzene	ND	0.043		mg/Kg	1	2/9/2021 1:07:42 PM	B75165
Xylenes, Total	ND	0.086		mg/Kg	1	2/9/2021 1:07:42 PM	B75165
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	2/9/2021 1:07:42 PM	B75165

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

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



## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW17

Project: Chaco 404 H

Collection Date: 2/8/2021 2:09:00 PM

Lab ID: 2102429-011

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	76	61		mg/Kg	20	2/9/2021 1:27:31 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/9/2021 11:30:36 AM	57995
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/9/2021 11:30:36 AM	57995
Surr: DNOP	114	70-130		%Rec	1	2/9/2021 11:30:36 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/9/2021 1:54:30 PM	G75165
Surr: BFB	105	75.3-105		%Rec	1	2/9/2021 1:54:30 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	2/9/2021 1:54:30 PM	B75165
Toluene	ND	0.035		mg/Kg	1	2/9/2021 1:54:30 PM	B75165
Ethylbenzene	ND	0.035		mg/Kg	1	2/9/2021 1:54:30 PM	B75165
Xylenes, Total	ND	0.070		mg/Kg	1	2/9/2021 1:54:30 PM	B75165
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	2/9/2021 1:54:30 PM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW18

Project: Chaco 404 H

Collection Date: 2/8/2021 2:11:00 PM

Lab ID: 2102429-012

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	63	60		mg/Kg	20	2/9/2021 1:39:55 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	2/9/2021 11:40:21 AM	57995
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/9/2021 11:40:21 AM	57995
Surr: DNOP	115	70-130		%Rec	1	2/9/2021 11:40:21 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	2/9/2021 2:17:57 PM	G75165
Surr: BFB	104	75.3-105		%Rec	1	2/9/2021 2:17:57 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	2/9/2021 2:17:57 PM	B75165
Toluene	ND	0.037		mg/Kg	1	2/9/2021 2:17:57 PM	B75165
Ethylbenzene	ND	0.037		mg/Kg	1	2/9/2021 2:17:57 PM	B75165
Xylenes, Total	ND	0.073		mg/Kg	1	2/9/2021 2:17:57 PM	B75165
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	2/9/2021 2:17:57 PM	B75165

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

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

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## Analytical Report

Lab Order 2102429

Date Reported: 2/12/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW19

Project: Chaco 404 H

Collection Date: 2/8/2021 2:13:00 PM

Lab ID: 2102429-013

Matrix: MEOH (SOIL)

Received Date: 2/9/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	140	60		mg/Kg	20	2/9/2021 1:52:20 PM	57997
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	220	8.5		mg/Kg	1	2/9/2021 11:50:09 AM	57995
Motor Oil Range Organics (MRO)	170	43		mg/Kg	1	2/9/2021 11:50:09 AM	57995
Surr: DNOP	114	70-130		%Rec	1	2/9/2021 11:50:09 AM	57995
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	2/9/2021 2:41:43 PM	G75165
Surr: BFB	106	75.3-105	S	%Rec	5	2/9/2021 2:41:43 PM	G75165
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.13		mg/Kg	5	2/9/2021 2:41:43 PM	B75165
Toluene	ND	0.25		mg/Kg	5	2/9/2021 2:41:43 PM	B75165
Ethylbenzene	ND	0.25		mg/Kg	5	2/9/2021 2:41:43 PM	B75165
Xylenes, Total	ND	0.50		mg/Kg	5	2/9/2021 2:41:43 PM	B75165
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	5	2/9/2021 2:41:43 PM	B75165

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

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

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

WO#: 2102429

12-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>MB-57997</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57997</b>	RunNo: <b>75154</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654410</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-57997</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57997</b>	RunNo: <b>75154</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654411</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

**Qualifiers:**

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

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



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

WO#: 2102429

12-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>MB-57995</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>57995</b>	RunNo: <b>75160</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2653624</b> Units: <b>mg/Kg</b>								
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	11		10.00		110	70	130			

Sample ID: <b>LCS-57995</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>57995</b>	RunNo: <b>75160</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2653626</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	68.9	141			
Surr: DNOP	5.2		5.000		104	70	130			

Sample ID: <b>2102429-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>FS38</b>	Batch ID: <b>57995</b>	RunNo: <b>75160</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654919</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.8	49.12	5.912	91.4	15	184			
Surr: DNOP	4.9		4.912		99.1	70	130			

Sample ID: <b>2102429-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>FS38</b>	Batch ID: <b>57995</b>	RunNo: <b>75160</b>								
Prep Date: <b>2/9/2021</b>	Analysis Date: <b>2/9/2021</b>	SeqNo: <b>2654920</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.7	48.26	5.912	93.2	15	184	0.162	23.9	
Surr: DNOP	4.8		4.826		98.9	70	130	0	0	

**Qualifiers:**

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

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



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

WO#: 2102429

12-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G75165</b>		RunNo: <b>75165</b>							
Prep Date:	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654236</b>		Units: <b>mg/Kg</b>					
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	75.3	105			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G75165</b>		RunNo: <b>75165</b>							
Prep Date:	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654237</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	80	120			
Surr: BFB	1200		1000		117	75.3	105			S

Sample ID: <b>2102429-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>FS38</b>	Batch ID: <b>G75165</b>		RunNo: <b>75165</b>							
Prep Date:	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654238</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.4	22.03	0	101	61.3	114			
Surr: BFB	1000		881.1		119	75.3	105			S

Sample ID: <b>2102429-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>FS38</b>	Batch ID: <b>G75165</b>		RunNo: <b>75165</b>							
Prep Date:	Analysis Date: <b>2/9/2021</b>		SeqNo: <b>2654239</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.4	22.03	0	101	61.3	114	0.0790	20	
Surr: BFB	1100		881.1		120	75.3	105	0	0	S

**Qualifiers:**

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

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



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

WO#: 2102429

12-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>B75165</b>			RunNo: <b>75165</b>						
Prep Date:	Analysis Date: <b>2/9/2021</b>			SeqNo: <b>2654292</b>		Units: <b>mg/Kg</b>				
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	80	120			

Sample ID: <b>100ng btex lcs</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>B75165</b>			RunNo: <b>75165</b>						
Prep Date:	Analysis Date: <b>2/9/2021</b>			SeqNo: <b>2654293</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.1	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.5	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: <b>2102429-002ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>FS39</b>	Batch ID: <b>B75165</b>			RunNo: <b>75165</b>						
Prep Date:	Analysis Date: <b>2/9/2021</b>			SeqNo: <b>2654294</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.018	0.7375	0	94.8	76.3	120			
Toluene	0.72	0.037	0.7375	0.008113	95.9	78.5	120			
Ethylbenzene	0.70	0.037	0.7375	0	95.5	78.1	124			
Xylenes, Total	2.1	0.074	2.213	0.01291	95.2	79.3	125			
Surr: 4-Bromofluorobenzene	0.79		0.7375		107	80	120			

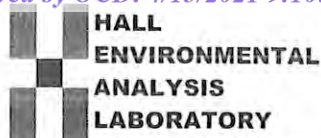
Sample ID: <b>2102429-002amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>FS39</b>	Batch ID: <b>B75165</b>			RunNo: <b>75165</b>						
Prep Date:	Analysis Date: <b>2/9/2021</b>			SeqNo: <b>2654295</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.69	0.018	0.7375	0	93.4	76.3	120	1.48	20	
Toluene	0.71	0.037	0.7375	0.008113	94.6	78.5	120	1.37	20	
Ethylbenzene	0.70	0.037	0.7375	0	94.6	78.1	124	0.936	20	
Xylenes, Total	2.1	0.074	2.213	0.01291	93.4	79.3	125	1.94	20	
Surr: 4-Bromofluorobenzene	0.80		0.7375		109	80	120	0	0	

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **Enduring Resources**Work Order Number: **2102429**

RcptNo: 1

Received By: **Desiree Dominguez** 2/9/2021 7:50:00 AMCompleted By: **Cheyenne Cason** 2/9/2021 7:54:39 AMReviewed By: **IO** 02/09/21

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: DAD 2/9/21

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.5	Good	Yes			













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

February 15, 2021

Stuart Hyde  
Enduring Resources  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX:

RE: Chaco 404 H

OrderNo.: 2102648

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/12/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2102648

Date Reported: 2/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW19-B

Project: Chaco 404 H

Collection Date: 2/11/2021 10:49:00 AM

Lab ID: 2102648-001

Matrix: MEOH (SOIL)

Received Date: 2/12/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	2/12/2021 9:14:02 AM	58079
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	2/12/2021 9:14:02 AM	58079
Surr: DNOP	126	70-130		%Rec	1	2/12/2021 9:14:02 AM	58079
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	2/12/2021 9:42:13 AM	58071
Surr: BFB	99.0	75.3-105		%Rec	1	2/12/2021 9:42:13 AM	58071
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	2/12/2021 9:42:13 AM	58071
Toluene	ND	0.035		mg/Kg	1	2/12/2021 9:42:13 AM	58071
Ethylbenzene	ND	0.035		mg/Kg	1	2/12/2021 9:42:13 AM	58071
Xylenes, Total	ND	0.070		mg/Kg	1	2/12/2021 9:42:13 AM	58071
Surr: 4-Bromofluorobenzene	95.3	80-120		%Rec	1	2/12/2021 9:42:13 AM	58071

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

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

Page 1 of 6



## Analytical Report

Lab Order 2102648

Date Reported: 2/15/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources

Client Sample ID: SW40-B

Project: Chaco 404 H

Collection Date: 2/11/2021 10:50:00 AM

Lab ID: 2102648-002

Matrix: MEOH (SOIL)

Received Date: 2/12/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	2/12/2021 9:23:28 AM	58079
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/12/2021 9:23:28 AM	58079
Surr: DNOP	120	70-130		%Rec	1	2/12/2021 9:23:28 AM	58079
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	2/12/2021 10:05:54 AM	58071
Surr: BFB	96.9	75.3-105		%Rec	5	2/12/2021 10:05:54 AM	58071
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.091		mg/Kg	5	2/12/2021 10:05:54 AM	58071
Toluene	ND	0.18		mg/Kg	5	2/12/2021 10:05:54 AM	58071
Ethylbenzene	ND	0.18		mg/Kg	5	2/12/2021 10:05:54 AM	58071
Xylenes, Total	ND	0.37		mg/Kg	5	2/12/2021 10:05:54 AM	58071
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	5	2/12/2021 10:05:54 AM	58071

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

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

Page 2 of 6



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

WO#: 2102648

15-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>MB-58079</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58079</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2657628</b>			Units: <b>mg/Kg</b>					
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	13		10.00		133	70	130			S

Sample ID: <b>LCS-58079</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58079</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2657629</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	68.9	141			
Surr: DNOP	5.4		5.000		109	70	130			

Sample ID: <b>2102648-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW19-B</b>	Batch ID: <b>58079</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658162</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.8	48.92	4.672	93.1	15	184			
Surr: DNOP	7.1		4.892		144	70	130			S

Sample ID: <b>2102648-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW19-B</b>	Batch ID: <b>58079</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658163</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.50	4.672	89.6	15	184	4.26	23.9	
Surr: DNOP	5.5		4.850		114	70	130	0	0	

Sample ID: <b>MB-58085</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58085</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658759</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		132	70	130			S

Sample ID: <b>LCS-58085</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58085</b>	RunNo: <b>75248</b>								
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658760</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2102648

15-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>LCS-58085</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58085</b>		RunNo: <b>75248</b>							
Prep Date: <b>2/12/2021</b>	Analysis Date: <b>2/12/2021</b>		SeqNo: <b>2658760</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.1		5.000		123	70	130			

**Qualifiers:**

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

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

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

WO#: 2102648

15-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>mb-58071</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58071</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658579</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		100	75.3	105			

Sample ID: <b>lcs-58071</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58071</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658580</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80	120			
Surr: BFB	1100		1000		111	75.3	105			S

Sample ID: <b>mb-58061</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58061</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/13/2021</b>	SeqNo: <b>2658603</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.3	75.3	105			

Sample ID: <b>lcs-58061</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58061</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658604</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		113	75.3	105			S

**Qualifiers:**

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

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



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

WO#: 2102648

15-Feb-21

**Client:** Enduring Resources**Project:** Chaco 404 H

Sample ID: <b>mb-58071</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58071</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658632</b> Units: <b>mg/Kg</b>								
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	0.97		1.000		97.0	80	120			

Sample ID: <b>LCS-58071</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58071</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658633</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.9	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.6	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	80	120			

Sample ID: <b>mb-58061</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58061</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/13/2021</b>	SeqNo: <b>2658656</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	80	120			

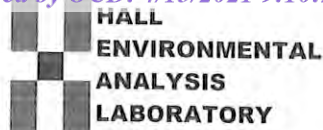
Sample ID: <b>LCS-58061</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58061</b>	RunNo: <b>75265</b>								
Prep Date: <b>2/11/2021</b>	Analysis Date: <b>2/12/2021</b>	SeqNo: <b>2658657</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	80	120			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: Enduring Resources

Work Order Number: 2102648

RcptNo: 1

Received By: Desiree Dominguez 2/12/2021 7:30:00 AM

Completed By: Cheyenne Cason 2/12/2021 7:47:27 AM

Reviewed By: SPA 2.12.21

Chain of Custody

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

Log In

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

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by: Cm 2/12/21Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			



Released to Imaging: 3/28/2022 11:13:12 AM

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

February 26, 2021

Stuart Hyde  
Whiptail  
332 Road 3100  
Aztec, NM 87140  
TEL:  
FAX

RE: Chaco 404 H

OrderNo.: 2102862

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 16 sample(s) on 2/19/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: FS45

Project: Chaco 404 H

Collection Date: 2/18/2021 2:34:00 PM

Lab ID: 2102862-001

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 7:05:40 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/22/2021 2:08:44 PM	58217
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/22/2021 2:08:44 PM	58217
Surr: DNOP	104	70-130		%Rec	1	2/22/2021 2:08:44 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/20/2021 6:42:00 PM	58215
Surr: BFB	90.2	75.3-105		%Rec	1	2/20/2021 6:42:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/20/2021 6:42:00 PM	58215
Toluene	ND	0.049		mg/Kg	1	2/20/2021 6:42:00 PM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/20/2021 6:42:00 PM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/20/2021 6:42:00 PM	58215
Surr: 4-Bromofluorobenzene	85.8	80-120		%Rec	1	2/20/2021 6:42:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: FS46

Project: Chaco 404 H

Collection Date: 2/18/2021 1:12:00 PM

Lab ID: 2102862-002

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	150	61		mg/Kg	20	2/22/2021 8:07:43 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	2/22/2021 2:32:32 PM	58217
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/22/2021 2:32:32 PM	58217
Surr: DNOP	99.6	70-130		%Rec	1	2/22/2021 2:32:32 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/20/2021 7:53:00 PM	58215
Surr: BFB	89.7	75.3-105		%Rec	1	2/20/2021 7:53:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	2/20/2021 7:53:00 PM	58215
Toluene	ND	0.049		mg/Kg	1	2/20/2021 7:53:00 PM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/20/2021 7:53:00 PM	58215
Xylenes, Total	ND	0.097		mg/Kg	1	2/20/2021 7:53:00 PM	58215
Surr: 4-Bromofluorobenzene	84.8	80-120		%Rec	1	2/20/2021 7:53:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW20

Project: Chaco 404 H

Collection Date: 2/18/2021 1:14:00 PM

Lab ID: 2102862-003

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	84	60		mg/Kg	20	2/22/2021 8:20:08 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/22/2021 2:56:24 PM	58217
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2021 2:56:24 PM	58217
Surr: DNOP	98.0	70-130		%Rec	1	2/22/2021 2:56:24 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/20/2021 8:16:00 PM	58215
Surr: BFB	89.2	75.3-105		%Rec	1	2/20/2021 8:16:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/20/2021 8:16:00 PM	58215
Toluene	ND	0.050		mg/Kg	1	2/20/2021 8:16:00 PM	58215
Ethylbenzene	ND	0.050		mg/Kg	1	2/20/2021 8:16:00 PM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/20/2021 8:16:00 PM	58215
Surr: 4-Bromofluorobenzene	84.6	80-120		%Rec	1	2/20/2021 8:16:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW21

Project: Chaco 404 H

Collection Date: 2/18/2021 2:35:00 PM

Lab ID: 2102862-004

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	290	60		mg/Kg	20	2/22/2021 8:32:32 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/22/2021 3:20:15 PM	58217
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	2/22/2021 3:20:15 PM	58217
Surr: DNOP	104	70-130		%Rec	1	2/22/2021 3:20:15 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/20/2021 8:40:00 PM	58215
Surr: BFB	89.3	75.3-105		%Rec	1	2/20/2021 8:40:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	2/20/2021 8:40:00 PM	58215
Toluene	ND	0.048		mg/Kg	1	2/20/2021 8:40:00 PM	58215
Ethylbenzene	ND	0.048		mg/Kg	1	2/20/2021 8:40:00 PM	58215
Xylenes, Total	ND	0.096		mg/Kg	1	2/20/2021 8:40:00 PM	58215
Surr: 4-Bromofluorobenzene	83.9	80-120		%Rec	1	2/20/2021 8:40:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS15

Project: Chaco 404 H

Collection Date: 2/18/2021 1:16:00 PM

Lab ID: 2102862-005

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 8:44:56 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/22/2021 3:44:09 PM	58217
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/22/2021 3:44:09 PM	58217
Surr: DNOP	96.7	70-130		%Rec	1	2/22/2021 3:44:09 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/20/2021 9:51:00 PM	58215
Surr: BFB	87.9	75.3-105		%Rec	1	2/20/2021 9:51:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/20/2021 9:51:00 PM	58215
Toluene	ND	0.049		mg/Kg	1	2/20/2021 9:51:00 PM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/20/2021 9:51:00 PM	58215
Xylenes, Total	ND	0.098		mg/Kg	1	2/20/2021 9:51:00 PM	58215
Surr: 4-Bromofluorobenzene	83.8	80-120		%Rec	1	2/20/2021 9:51:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS16

Project: Chaco 404 H

Collection Date: 2/18/2021 1:17:00 PM

Lab ID: 2102862-006

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	73	60		mg/Kg	20	2/22/2021 8:57:21 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/22/2021 4:08:03 PM	58217
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/22/2021 4:08:03 PM	58217
Surr: DNOP	97.2	70-130		%Rec	1	2/22/2021 4:08:03 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/20/2021 10:14:00 PM	58215
Surr: BFB	86.1	75.3-105		%Rec	1	2/20/2021 10:14:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	2/20/2021 10:14:00 PM	58215
Toluene	ND	0.046		mg/Kg	1	2/20/2021 10:14:00 PM	58215
Ethylbenzene	ND	0.046		mg/Kg	1	2/20/2021 10:14:00 PM	58215
Xylenes, Total	ND	0.092		mg/Kg	1	2/20/2021 10:14:00 PM	58215
Surr: 4-Bromofluorobenzene	81.7	80-120		%Rec	1	2/20/2021 10:14:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS17

Project: Chaco 404 H

Collection Date: 2/18/2021 1:18:00 PM

Lab ID: 2102862-007

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	72	60		mg/Kg	20	2/22/2021 9:09:46 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/22/2021 4:31:56 PM	58217
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/22/2021 4:31:56 PM	58217
Surr: DNOP	99.5	70-130		%Rec	1	2/22/2021 4:31:56 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/20/2021 10:38:00 PM	58215
Surr: BFB	86.6	75.3-105		%Rec	1	2/20/2021 10:38:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.023		mg/Kg	1	2/20/2021 10:38:00 PM	58215
Toluene	ND	0.046		mg/Kg	1	2/20/2021 10:38:00 PM	58215
Ethylbenzene	ND	0.046		mg/Kg	1	2/20/2021 10:38:00 PM	58215
Xylenes, Total	ND	0.092		mg/Kg	1	2/20/2021 10:38:00 PM	58215
Surr: 4-Bromofluorobenzene	83.1	80-120		%Rec	1	2/20/2021 10:38:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS18

Project: Chaco 404 H

Collection Date: 2/18/2021 1:39:00 PM

Lab ID: 2102862-008

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	59		mg/Kg	20	2/22/2021 9:22:10 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	2/22/2021 4:55:52 PM	58217
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	2/22/2021 4:55:52 PM	58217
Surr: DNOP	101	70-130		%Rec	1	2/22/2021 4:55:52 PM	58217
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/20/2021 11:01:00 PM	58215
Surr: BFB	88.4	75.3-105		%Rec	1	2/20/2021 11:01:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/20/2021 11:01:00 PM	58215
Toluene	ND	0.049		mg/Kg	1	2/20/2021 11:01:00 PM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/20/2021 11:01:00 PM	58215
Xylenes, Total	ND	0.098		mg/Kg	1	2/20/2021 11:01:00 PM	58215
Surr: 4-Bromofluorobenzene	84.5	80-120		%Rec	1	2/20/2021 11:01:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS19

Project: Chaco 404 H

Collection Date: 2/18/2021 1:40:00 PM

Lab ID: 2102862-009

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 9:34:34 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	2/22/2021 2:20:25 PM	58222
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/22/2021 2:20:25 PM	58222
Surr: DNOP	106	70-130		%Rec	1	2/22/2021 2:20:25 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/20/2021 11:25:00 PM	58215
Surr: BFB	86.3	75.3-105		%Rec	1	2/20/2021 11:25:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	2/20/2021 11:25:00 PM	58215
Toluene	ND	0.048		mg/Kg	1	2/20/2021 11:25:00 PM	58215
Ethylbenzene	ND	0.048		mg/Kg	1	2/20/2021 11:25:00 PM	58215
Xylenes, Total	ND	0.097		mg/Kg	1	2/20/2021 11:25:00 PM	58215
Surr: 4-Bromofluorobenzene	84.0	80-120		%Rec	1	2/20/2021 11:25:00 PM	58215

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

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

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## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area FS20

Project: Chaco 404 H

Collection Date: 2/18/2021 1:41:00 PM

Lab ID: 2102862-010

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 10:11:48 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/22/2021 3:09:33 PM	58222
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/22/2021 3:09:33 PM	58222
Surr: DNOP	107	70-130		%Rec	1	2/22/2021 3:09:33 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/20/2021 11:48:00 PM	58215
Surr: BFB	89.0	75.3-105		%Rec	1	2/20/2021 11:48:00 PM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	2/20/2021 11:48:00 PM	58215
Toluene	ND	0.047		mg/Kg	1	2/20/2021 11:48:00 PM	58215
Ethylbenzene	ND	0.047		mg/Kg	1	2/20/2021 11:48:00 PM	58215
Xylenes, Total	ND	0.094		mg/Kg	1	2/20/2021 11:48:00 PM	58215
Surr: 4-Bromofluorobenzene	84.3	80-120		%Rec	1	2/20/2021 11:48:00 PM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW10

Project: Chaco 404 H

Collection Date: 2/18/2021 1:57:00 PM

Lab ID: 2102862-011

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	280	60		mg/Kg	20	2/22/2021 10:24:13 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	2/22/2021 3:19:20 PM	58222
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/22/2021 3:19:20 PM	58222
Surr: DNOP	112	70-130		%Rec	1	2/22/2021 3:19:20 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/21/2021 12:12:00 AM	58215
Surr: BFB	87.9	75.3-105		%Rec	1	2/21/2021 12:12:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/21/2021 12:12:00 AM	58215
Toluene	ND	0.050		mg/Kg	1	2/21/2021 12:12:00 AM	58215
Ethylbenzene	ND	0.050		mg/Kg	1	2/21/2021 12:12:00 AM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/21/2021 12:12:00 AM	58215
Surr: 4-Bromofluorobenzene	83.8	80-120		%Rec	1	2/21/2021 12:12:00 AM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW11

Project: Chaco 404 H

Collection Date: 2/18/2021 1:58:00 PM

Lab ID: 2102862-012

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	220	61		mg/Kg	20	2/22/2021 10:36:38 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/22/2021 3:29:09 PM	58222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2021 3:29:09 PM	58222
Surr: DNOP	114	70-130		%Rec	1	2/22/2021 3:29:09 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2021 12:35:00 AM	58215
Surr: BFB	90.1	75.3-105		%Rec	1	2/21/2021 12:35:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/21/2021 12:35:00 AM	58215
Toluene	ND	0.049		mg/Kg	1	2/21/2021 12:35:00 AM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2021 12:35:00 AM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/21/2021 12:35:00 AM	58215
Surr: 4-Bromofluorobenzene	85.3	80-120		%Rec	1	2/21/2021 12:35:00 AM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW12

Project: Chaco 404 H

Collection Date: 2/18/2021 1:59:00 PM

Lab ID: 2102862-013

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 10:49:02 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/22/2021 3:38:57 PM	58222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2021 3:38:57 PM	58222
Surr: DNOP	117	70-130		%Rec	1	2/22/2021 3:38:57 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2021 12:59:00 AM	58215
Surr: BFB	88.0	75.3-105		%Rec	1	2/21/2021 12:59:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/21/2021 12:59:00 AM	58215
Toluene	ND	0.049		mg/Kg	1	2/21/2021 12:59:00 AM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2021 12:59:00 AM	58215
Xylenes, Total	ND	0.098		mg/Kg	1	2/21/2021 12:59:00 AM	58215
Surr: 4-Bromofluorobenzene	85.5	80-120		%Rec	1	2/21/2021 12:59:00 AM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW13

Project: Chaco 404 H

Collection Date: 2/18/2021 2:30:00 PM

Lab ID: 2102862-014

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	100	60		mg/Kg	20	2/22/2021 11:01:27 PM	58247
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/22/2021 3:48:44 PM	58222
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/22/2021 3:48:44 PM	58222
Surr: DNOP	117	70-130		%Rec	1	2/22/2021 3:48:44 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/21/2021 1:23:00 AM	58215
Surr: BFB	89.1	75.3-105		%Rec	1	2/21/2021 1:23:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.024		mg/Kg	1	2/21/2021 1:23:00 AM	58215
Toluene	ND	0.049		mg/Kg	1	2/21/2021 1:23:00 AM	58215
Ethylbenzene	ND	0.049		mg/Kg	1	2/21/2021 1:23:00 AM	58215
Xylenes, Total	ND	0.098		mg/Kg	1	2/21/2021 1:23:00 AM	58215
Surr: 4-Bromofluorobenzene	85.7	80-120		%Rec	1	2/21/2021 1:23:00 AM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW14

Project: Chaco 404 H

Collection Date: 2/18/2021 2:31:00 PM

Lab ID: 2102862-015

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	300	60		mg/Kg	20	2/22/2021 5:40:03 PM	58248
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	2/22/2021 3:58:30 PM	58222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2021 3:58:30 PM	58222
Surr: DNOP	119	70-130		%Rec	1	2/22/2021 3:58:30 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/21/2021 2:09:00 AM	58215
Surr: BFB	88.1	75.3-105		%Rec	1	2/21/2021 2:09:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/21/2021 2:09:00 AM	58215
Toluene	ND	0.050		mg/Kg	1	2/21/2021 2:09:00 AM	58215
Ethylbenzene	ND	0.050		mg/Kg	1	2/21/2021 2:09:00 AM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/21/2021 2:09:00 AM	58215
Surr: 4-Bromofluorobenzene	84.0	80-120		%Rec	1	2/21/2021 2:09:00 AM	58215

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

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



## Analytical Report

Lab Order 2102862

Date Reported: 2/26/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Whiptail

Client Sample ID: SW Area SW15

Project: Chaco 404 H

Collection Date: 2/18/2021 2:32:00 PM

Lab ID: 2102862-016

Matrix: SOIL

Received Date: 2/19/2021 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	2/22/2021 6:17:18 PM	58248
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	2/22/2021 4:08:15 PM	58222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/22/2021 4:08:15 PM	58222
Surr: DNOP	116	70-130		%Rec	1	2/22/2021 4:08:15 PM	58222
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	2/21/2021 2:33:00 AM	58215
Surr: BFB	87.2	75.3-105		%Rec	1	2/21/2021 2:33:00 AM	58215
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	2/21/2021 2:33:00 AM	58215
Toluene	ND	0.050		mg/Kg	1	2/21/2021 2:33:00 AM	58215
Ethylbenzene	ND	0.050		mg/Kg	1	2/21/2021 2:33:00 AM	58215
Xylenes, Total	ND	0.099		mg/Kg	1	2/21/2021 2:33:00 AM	58215
Surr: 4-Bromofluorobenzene	84.2	80-120		%Rec	1	2/21/2021 2:33:00 AM	58215

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

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



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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>MB-58247</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58247</b>		RunNo: <b>75450</b>							
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/22/2021</b>		SeqNo: <b>2666522</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58247</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58247</b>		RunNo: <b>75450</b>							
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/22/2021</b>		SeqNo: <b>2666523</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Sample ID: <b>MB-58248</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58248</b>		RunNo: <b>75453</b>							
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/22/2021</b>		SeqNo: <b>2666592</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-58248</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58248</b>		RunNo: <b>75453</b>							
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/22/2021</b>		SeqNo: <b>2666593</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

**Qualifiers:**

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

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

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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>MB-58217</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58217</b>	RunNo: <b>75446</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666154</b> Units: <b>mg/Kg</b>								
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	10		10.00		104	70	130			

Sample ID: <b>LCS-58217</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58217</b>	RunNo: <b>75446</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666155</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.1	68.9	141			
Surr: DNOP	5.3		5.000		106	70	130			

Sample ID: <b>MB-58222</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58222</b>	RunNo: <b>75455</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666694</b> Units: <b>mg/Kg</b>								
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	15		10.00		153	70	130			S

Sample ID: <b>MB-58224</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58224</b>	RunNo: <b>75455</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666695</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		114	70	130			

Sample ID: <b>MB-58226</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58226</b>	RunNo: <b>75455</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666696</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		118	70	130			

Sample ID: <b>LCS-58222</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58222</b>	RunNo: <b>75455</b>								
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>	SeqNo: <b>2666697</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>LCS-58222</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58222</b>			RunNo: <b>75455</b>						
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>			SeqNo: <b>2666697</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	68.9	141			
Surr: DNOP	5.3		5.000		107	70	130			

Sample ID: <b>LCS-58224</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58224</b>			RunNo: <b>75455</b>						
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>			SeqNo: <b>2666698</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.0		5.000		120	70	130			

Sample ID: <b>LCS-58226</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58226</b>			RunNo: <b>75455</b>						
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>			SeqNo: <b>2666699</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.8		5.000		117	70	130			

Sample ID: <b>2102862-009AMS</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>SW Area FS19</b>	Batch ID: <b>58222</b>			RunNo: <b>75455</b>						
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>			SeqNo: <b>2666700</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.64	5.077	92.8	15	184			
Surr: DNOP	5.1		4.864		104	70	130			

Sample ID: <b>2102862-009AMSD</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>SW Area FS19</b>	Batch ID: <b>58222</b>			RunNo: <b>75455</b>						
Prep Date: <b>2/20/2021</b>	Analysis Date: <b>2/22/2021</b>			SeqNo: <b>2666703</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.69	5.077	92.9	15	184	0.194	23.9	
Surr: DNOP	5.0		4.869		102	70	130	0	0	

Sample ID: <b>MB-58245</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58245</b>			RunNo: <b>75488</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/23/2021</b>			SeqNo: <b>2667682</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.2		10.00		92.0	70	130			

**Qualifiers:**

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

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

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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>LCS-58209</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58209</b>			RunNo: <b>75488</b>						
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/23/2021</b>			SeqNo: <b>2667683</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.1		5.000		122	70	130			

Sample ID: <b>LCS-58245</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58245</b>			RunNo: <b>75488</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/23/2021</b>			SeqNo: <b>2667684</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.1	70	130			

Sample ID: <b>MB-58209</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58209</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/23/2021</b>			SeqNo: <b>2667817</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		122	70	130			

Sample ID: <b>MB-58251</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58251</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2667821</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	70	130			

Sample ID: <b>MB-58252</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58252</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2667822</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		115	70	130			

Sample ID: <b>LCS-58251</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58251</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2667827</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.5		5.000		109	70	130			

**Qualifiers:**

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

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



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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>LCS-58252</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58252</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/22/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2667828</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.5		5.000		131	70	130			S

Sample ID: <b>MB-58298</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58298</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/24/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2668177</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		112	70	130			

Sample ID: <b>LCS-58298</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58298</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/24/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2668178</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.1		5.000		121	70	130			

Sample ID: <b>LCS-58274</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>58274</b>			RunNo: <b>75467</b>						
Prep Date: <b>2/23/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2668555</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.7		5.000		134	70	130			S

Sample ID: <b>MB-58274</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>58274</b>			RunNo: <b>75488</b>						
Prep Date: <b>2/23/2021</b>	Analysis Date: <b>2/24/2021</b>			SeqNo: <b>2669100</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		124	70	130			

**Qualifiers:**

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

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



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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>LCS-58215</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>58215</b>		RunNo: <b>75442</b>							
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>		SeqNo: <b>2665898</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.6	80	120			
Surr: BFB	980		1000		97.9	75.3	105			

Sample ID: <b>MB-58215</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>58215</b>		RunNo: <b>75442</b>							
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>		SeqNo: <b>2665899</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.8	75.3	105			

**Qualifiers:**

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

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



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

WO#: 2102862

26-Feb-21

**Client:** Whiptail  
**Project:** Chaco 404 H

Sample ID: <b>LCS-58215</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>58215</b>	RunNo: <b>75442</b>								
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>	SeqNo: <b>2665932</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.1	80	120			
Toluene	0.83	0.050	1.000	0	82.8	80	120			
Ethylbenzene	0.82	0.050	1.000	0	81.9	80	120			
Xylenes, Total	2.5	0.10	3.000	0	81.9	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		84.7	80	120			

Sample ID: <b>MB-58215</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>58215</b>	RunNo: <b>75442</b>								
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>	SeqNo: <b>2665933</b>	Units: <b>mg/Kg</b>							
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		85.7	80	120			

Sample ID: <b>2102862-001ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS45</b>	Batch ID: <b>58215</b>	RunNo: <b>75442</b>								
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>	SeqNo: <b>2665939</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	0.9881	0	91.0	76.3	120			
Toluene	0.89	0.049	0.9881	0	90.0	78.5	120			
Ethylbenzene	0.89	0.049	0.9881	0	90.0	78.1	124			
Xylenes, Total	2.7	0.099	2.964	0	90.1	79.3	125			
Surr: 4-Bromofluorobenzene	0.86		0.9881		86.6	80	120			

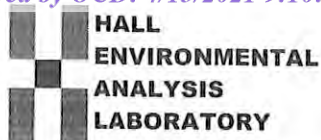
Sample ID: <b>2102862-001amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>FS45</b>	Batch ID: <b>58215</b>	RunNo: <b>75442</b>								
Prep Date: <b>2/19/2021</b>	Analysis Date: <b>2/20/2021</b>	SeqNo: <b>2665940</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.9	76.3	120	1.14	20	
Toluene	0.88	0.050	1.000	0	88.1	78.5	120	0.870	20	
Ethylbenzene	0.88	0.050	1.000	0	88.0	78.1	124	1.07	20	
Xylenes, Total	2.6	0.10	3.000	0	88.1	79.3	125	1.09	20	
Surr: 4-Bromofluorobenzene	0.86		1.000		86.2	80	120	0	0	

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: Enduring Resources

Work Order Number: 2102862

RcptNo: 1

Received By: Sean Livingston

2/19/2021 8:30:00 AM

Completed By: Sean Livingston

2/19/2021 9:09:28 AM

Reviewed By:

ENM

2/19/21

*Sean Livingston*  
*Sean Livingston*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: DAD 2/19/21

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good				



Released to Imaging: 3/28/2022 11:13:12 AM

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







## ENCLOSURE E – SOIL DELINEATION BORING LOGS





Advancing Opportunity

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH01 Project: Chaco 2308Date: 10/19 Project Number: 077920007Logged By: E. Carroll Drilled By: Enviro-DrillDrilling Method: Hollow Stem Auger Sampling Method: ContinuousSeal: Hydrated Bentonite Chips Grout: Bentonite-Cement SlurryDiameter: 2" Length: 6" Hole Diameter: 6" Depth to Liquid: NADiameter: 2" Length: 15' Total Depth: 15' Depth to Water: NAElevation: 5,688Detector: PIDGravel Pack: 10-20 Silica SandCasing Type: Schedule 40 PVCScreen Type: Schedule 40 PVC Slot: 0.010"

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				moist, coarse sand, trace silt dark brown	
	m	3.5	N		1				Q <sub>tab</sub> = 2.6 / 316 mg/L	
					2	1				
					3				moist, Dark brown and black sand and clay	
	m	4.6	N		4				Q <sub>tab</sub> = 1.0 / <120 mg/L	
					5					
					6				Dry black, clay, few sand	
	D	3.5	N		7				Q <sub>tab</sub> = 1.0 < 120 mg/L	
					8	2			SAA Dry black, weathered shale	
					9				Q <sub>tab</sub> = 1.0 < 120 mg/L	
	P	4.1	N		10					
					11				SAA	
					12				Q <sub>tab</sub> = 0.8 < 120	
					13	3			SAA	
					14				Q <sub>tab</sub> = 0.8 < 120	
					15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH02</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/19</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b> Length: <b>6'</b>	Hole Diameter: <b>6"</b> Depth to Liquid: <b>NA</b>
Screen Type: <b>Schedule 40 PVC</b> Slot: <b>0.010"</b>		Diameter: <b>2"</b> Length: <b>15'</b>	Total Depth: <b>15'</b> Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		1.9	N		0				Dry lt reddish brown, coarse sand, some salt crusting	
					1				Q <sub>tab</sub> = 1.6 / 120 mg/L	
					2					
		3.2	N	BH02 2.5-5.5 1730	3				Dry lt brown, coarse sand	
					4				Q <sub>tab</sub> = 1.6 / 120 mg/L	
					5					
		2.2	N		6				Dry gray black, highly weathered shale	
					7				Q <sub>tab</sub> = 1.2 < 120 mg/L	
					8					
		2.1	N		9				Dry black, weathered shale	
					10				Q <sub>tab</sub> = 1.0 < 120 mg/L	
					11				SAA	
		1.1	N		12				Q <sub>tab</sub> = 0.8 < 120 mg/L	
					13				SAA	
		0.8	N	BH02 12.5-15' 1730	14				SAA	
					15				Q <sub>tab</sub> = 0.6 < 120 mg/L	





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH03</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/19/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>	Diameter: <b>2"</b>	Length: <b>6"</b>	Hole Diameter: <b>6"</b>
Screen Type: <b>Schedule 40 PVC</b>	Slot: <b>0.010"</b>	Diameter: <b>2"</b>	Length: <b>15'</b>
		Total Depth: <b>15'</b>	Depth to Liquid: <b>N/A</b>
			Depth to Water: <b>N/A</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		1.0	N		0				Dry lt brown, coarse sand, few silt	
					1				Q <sub>tab</sub> = 0.8 < 120 mg/l	
					2					
		1.7	N	BH03	3				SAA	
				25-3	4				Q <sub>tab</sub> = 0.6 < 120 mg/l	
				13W	5				Highly weathered shale	
		0.8	N		6				Black weathered shale	
					7				Q <sub>tab</sub> = 0.4 < 120 mg/l	
		0.7	N		8				SAA	
					9				Q <sub>tab</sub> = 0.4 < 120	
					10					
		1.0	N		11				SAA	
					12				Q <sub>tab</sub> = 0.4 < 120	
		0.8	N	BH03	13				SAA	
				12.5-	14				Q <sub>tab</sub> = 0.2 < 120	
				15.25	15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH04</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/19</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Drilling Method: <b>Hollow Stem Auger</b>		Sampling Method: <b>Continuous</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>		
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	
Casing Type: <b>Schedule 40 PVC</b>		Grout: <b>Bentonite-Cement Slurry</b>	
Screen Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b>	Length: <b>6'</b>
Slot: <b>0.010"</b>		Hole Diameter: <b>6"</b>	Depth to Liquid: <b>NA</b>
		Diameter: <b>2"</b>	Length: <b>15'</b>
		Total Depth: <b>15'</b>	Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		1.3	N		0				Dry, lt brown, coarse sand, few silb	
					1				Q tab = 1.0 < 120 mg/l	
					2					
		1.6	N		3				Dry lt brown, sand, some silb	
					4				Q tab = 1.0 < 120 mg/l	
					5					
		2.5	N		6				SAA	
					7				Q tab = 1.0 < 120 mg/l	
		4.0	N	BH04 75-12	8				SAA weathered shale @ 9'	
				1340	9				Q tab = 1.0 < 120 mg/l	
					10					
		0.9	N		11				Black weathered shale	
					12				Q tab = 0.8 < 120 mg/l	
		0.9	N	BH04 125-13	13				SAA	
				1350	14				Q tab = 1.0 < 120 mg/l	
					15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <i>BH05</i>	Project: Chaco 2308
Date: <i>10/19/20</i>	Project Number: 077920007
Logged By: E. Carroll	Drilled By: Enviro-Drill
Elevation: 5,688	Detector: PID
Gravel Pack: 10-20 Silica Sand	Drilling Method: Hollow Stem Auger
Casing Type: Schedule 40 PVC	Seal: Hydrated Bentonite Chips
Screen Type: Schedule 40 PVC	Grout: Bentonite-Cement Slurry
Slot: 0.010"	Diameter: 2"
	Length: 6'
	Hole Diameter: 6"
	Depth to Liquid: NA
	Total Depth: 15'
	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		4.0	N		0				Dry, it brown sand, some Silts	
					1				$Q_{tab} = 0.4 < 120$	
					2					
		5.1	N	BH05	3				SAA	
				2.5-5	4				$Q_{tab} = 0.6 < 120$	
				1420	5					
		1.8	N		6				Dry, gray sand, some Silts	
					7				$Q_{tab} = 0.0 < 120$	
		1.6	N		8				Highly weathered black shale	
					9				$Q_{tab} = 0.0 < 120$	
					10					
		1.8	N		11				SAA	
					12				$Q_{tab} = 0.0 < 120$	
		1.3	N	BH05	13				SAA	
				12.5-15	14				$Q_{tab} = 0.2 < 120$	
				1426	15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <i>BH06</i>	Project: Chaco 2308
Date: <i>10/19/20</i>	Project Number: 077920007
Logged By: E. Carroll	Drilled By: Enviro-Drill
Elevation: 5,688	Detector: PID
Drilling Method: Hollow Stem Auger	Sampling Method: Continuous
Gravel Pack: 10-20 Silica Sand	Seal: Hydrated Bentonite Chips
Casing Type: Schedule 40 PVC	Grout: Bentonite-Cement Slurry
Screen Type: Schedule 40 PVC	Diameter: 2"
Slot: 0.010"	Length: 2"
	Hole Diameter: 6"
	Depth to Liquid: NA
	Total Depth: 15'
	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					0					
	D	1.3	N		1				Dry, lt brown sand, some silt	
					2				Q <sub>tab</sub> = 0.6 < 120 m/k	
					3				SAA	
	D	33.4	N	BH06 2.5-5 1500	4				Q <sub>tab</sub> = 0.6 < 120	
					5				Dark brown sandy, some silt	
	D	12.8	N		6				Q <sub>tab</sub> = 0.4 < 120	
					7					
					8				SAA	
	D	6.2	N		9				Q <sub>tab</sub> = 0.4 < 120	
					10					
	D	3.1	N		11				Black weathered shale	
					12				Q <sub>tab</sub> = 0.4 < 120	
					13				SAA	
	D	1.7	N	BH06 12.5-15 1510	14				Q <sub>tab</sub> = 0.2 < 120	
					15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH07</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/19/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b>	Length: <b>6'</b>
Screen Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b>	Length: <b>15'</b>
Slot: <b>0.010"</b>		Total Depth: <b>15'</b>	
		Depth to Liquid: <b>NA</b>	
		Depth to Water: <b>NA</b>	

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				Dry, lt brown, sand, some silt	
D	1.2	N			1					
					2				Q tab = 2.8 / 364 mg/L	
					3				moist Dry, brown sand, some silt	
m	5.1	N		BH07 2.5-5 09:40	4				Q tab = 4.2 / 748 mg/L	
					5					
					6				Black weathered shale	
D	3.6	N			7				Q tab = 2.4 / 268 mg/L	
					8				SAA	
D	3.2	N			9				Q tab = 0.8 < 120	
					10					
					11				NO Recovery	
					12					
					13				Black weathered shale	
D	2.8	N		BH07 12.5-15' 10:00	14				Q tab = 0.8 < 120	
					15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number:	BH08	Project:	Chaco 2308
Date:	10/20	Project Number:	077920007
Logged By:	E. Carroll	Drilled By:	Enviro-Drill
Elevation:	5,688	Drilling Method:	Hollow Stem Auger
Detector:	PID	Sampling Method:	Continuous
Gravel Pack:	10-20 Silica Sand	Seal:	Hydrated Bentonite Chips
Casing Type:	Schedule 40 PVC	Grout:	Bentonite-Cement Slurry
Screen Type:	Schedule 40 PVC	Diameter:	2"
Slot:	0.010"	Length:	6"
		Hole Diameter:	6"
		Depth to Liquid:	NA
		Total Depth:	15'
		Depth to Water:	NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
				BH08	0				Dry it brown sand, some silb	
				0-2.5	1				Q <sub>tab</sub> = 0.6 < 120 mg/L	
				10:10	2					
					3				SAA	
					4				Q <sub>tab</sub> = 0.4 < 120	
					5					
					6				Black weathered shale	
					7				Q <sub>tab</sub> = 0.4 < 120	
					8					
					9				Black weathered shale	
					10				Q <sub>tab</sub> = 0.4 < 120	
					11				SAA	
					12				Q <sub>tab</sub> = 0.2 < 120	
					13					
				BH08	13				SAA	
				12-5-15	14					
				10:20	15				Q <sub>tab</sub> = 0.2 < 120	





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH09</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b>	Length: <b>6"</b>
Screen Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b>	Length: <b>15'</b>
Slot: <b>0.010"</b>		Total Depth: <b>15'</b>	Depth to Liquid: <b>NA</b>
			Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					0					
	D	0.8	N	BH09 0-5'	1				Dry, 12 brown, coarse sand	
				1050	2				Some silt	
	↓	↓	↓		3				10w recovery 0-5'	
	↓	↓	↓		4				Q <sub>tab</sub> = 0.6 < 120	
					5					
	D	2.4	N		6				Dry Black weathered shale	
					7				10w recovery 5-10'	
	↓	↓	↓		8				Q <sub>tab</sub> = 0.7 < 120 mpa	
					9					
					10					
	D	1.6	N	BH09 10-15'	11				SAA	
				11:00	12				10w recovery 10-15'	
	↓	↓	↓		13				Q <sub>tab</sub> = 0.2 < 120 mpa	
					14					
					15					





Advancing Opportunity

## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH10</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>	Diameter: <b>2"</b>	Length:	Hole Diameter: <b>6"</b>
Screen Type: <b>Schedule 40 PVC</b>	Slot: <b>0.010"</b>	Diameter: <b>2"</b>	Length:
		Total Depth: <b>15'</b>	Depth to Liquid: <b>NA</b>
			Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	8.2	N	BH10 0-2.5 11:30	0				Dry lt brown sand, some silt Q <sub>tab</sub> = 2.4 268 mg/L	
	M	7.8	N		3				Dry highly weathered shale Q <sub>tab</sub> = 2.2 274 mg/L	
	M	5.9	N		6				Dry weathered shale Q <sub>tab</sub> = 1.4 <120 mg/L	
	M	5.6	N		9				SAA Q <sub>tab</sub> = 0.8 <120 mg/L	
	D	4.2	N		11				SAA Q <sub>tab</sub> = 0.8 <120 mg/L	
	D	3.6	N	BH10 12.5-15 11:45	13				SAA Q <sub>tab</sub> = 0.4 <120 mg/L	





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH11</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/20/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>	Diameter: <b>2"</b>	Length:	Hole Diameter: <b>6"</b>
Screen Type: <b>Schedule 40 PVC</b>	Slot: <b>0.010"</b>	Diameter: <b>2"</b>	Length:
		Total Depth: <b>15'</b>	Depth to Liquid: <b>NA</b>
			Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	114.3	N	BH11	0				moist, brown, sand, some silt, shale at 2'	
		<del>42.8</del>	@ Surface	0-2.5'	1				Q <sub>tob</sub> = 4.0 688 mg/L	
				12:00	2					
	M	42.8	N		3				Black, moist, highly weathered shale	
		<del>114.3</del>			4				Q <sub>tob</sub> = 1.0 < 120 mg/L	
					5					
	D	39.7	N		6				Black, weathered shale	
					7				Q <sub>tob</sub> = 0.6 < 120 mg/L	
					8				SAA	
	D	37.3	N		9				Q <sub>tob</sub> = 0.6 < 120 mg/L	
					10					
	D	19.5	N		11				SAA	
					12				Q <sub>tob</sub> = 0.4 < 120 mg/L	
					13				SAA	
	D	12.3	N	BH11	14				Q <sub>tob</sub> = 0.4 < 120 mg/L	
				12:15	15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH 12</b>		Project: <b>Chaco 2308</b>	
Date: <b>10/20/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b> Length:	Hole Diameter: <b>6"</b> Depth to Liquid: <b>NA</b>
Screen Type: <b>Schedule 40 PVC</b> Slot: <b>0.010"</b>		Diameter: <b>2"</b> Length:	Total Depth: <b>15'9"</b> Depth to Water: <b>NA</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					0				Hydro vac pit hole to 1'	
	M	315	N	BH12 0-2.5 1300	1				loose, lt brown coarse sand	
					2				Q <sub>tab</sub> = 1.6 120 mg/L	
	M	244	Y	BH12 2.5-5 1310	3				loose, lt brown sand, some clay	
					4				& silt gray HC stain	
					5				Q <sub>tab</sub> = 6.6 1,740 mg/L	
	D	35.2	N		6				Dry, weathered, black shale	
					7				Q <sub>tab</sub> = 3.0 417 mg/L	
	D	153	N	BH12 7.5-9 1320	8				SAA	
					9				Q <sub>tab</sub> = 2.0 184 mg/L	
					10				Refusal @ 9'	
					11					
					12					
					13					
					14					
					15					





## BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: <b>BH13</b>		Project: <b>Chaco 2308</b>	
Date: <b>6/20</b>		Project Number: <b>077920007</b>	
Logged By: <b>E. Carroll</b>		Drilled By: <b>Enviro-Drill</b>	
Elevation: <b>5,688</b>	Detector: <b>PID</b>	Drilling Method: <b>Hollow Stem Auger</b>	Sampling Method: <b>Continuous</b>
Gravel Pack: <b>10-20 Silica Sand</b>		Seal: <b>Hydrated Bentonite Chips</b>	Grout: <b>Bentonite-Cement Slurry</b>
Casing Type: <b>Schedule 40 PVC</b>		Diameter: <b>2"</b> Length:	Hole Diameter: <b>2"</b> Depth to Liquid: <b>N/A</b>
Screen Type: <b>Schedule 40 PVC</b> Slot: <b>0.010"</b>		Diameter: <b>2"</b> Length:	Total Depth: <b>6'</b> Depth to Water: <b>N/A</b>

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	D	2.3	N		0				Dry, lt brown sand, some silt	
					1				Q <sub>tab</sub> = 0.6 < 120 mg/L	
					2					
	D	1.8	N		3				SAA	
					4				Q <sub>tab</sub> = 0.6 < 120 mg/L	
					5					
					6					
					7					
					8				Refusal @ 6'	
					9					
					10					
					11					
					12					
					13					
					14					
					15					



ENCLOSURE F – SITE DELINEATION SOIL ANALYTICAL  
LABORATORY REPORTS





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

September 09, 2020

Stuart Hyde

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX:

RE: Chaco 2308 03L 405H

OrderNo.: 2009004

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 36 sample(s) on 9/1/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:00:00 AM

Lab ID: 2009004-001

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2020 4:58:56 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 4:58:56 PM
Surr: DNOP	89.7	30.4-154		%Rec	1	9/1/2020 4:58:56 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/1/2020 10:49:17 AM
Surr: BFB	96.6	75.3-105		%Rec	1	9/1/2020 10:49:17 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 10:49:17 AM
Toluene	ND	0.045		mg/Kg	1	9/1/2020 10:49:17 AM
Ethylbenzene	ND	0.045		mg/Kg	1	9/1/2020 10:49:17 AM
Xylenes, Total	ND	0.090		mg/Kg	1	9/1/2020 10:49:17 AM
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/1/2020 10:49:17 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 6:53:10 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:05:00 AM

Lab ID: 2009004-002

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/1/2020 6:11:44 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 6:11:44 PM
Surr: DNOP	100	30.4-154		%Rec	1	9/1/2020 6:11:44 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 11:59:49 AM
Surr: BFB	98.0	75.3-105		%Rec	1	9/1/2020 11:59:49 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 11:59:49 AM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 11:59:49 AM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 11:59:49 AM
Xylenes, Total	ND	0.084		mg/Kg	1	9/1/2020 11:59:49 AM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 11:59:49 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 7:55:13 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS03

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:08:00 AM

Lab ID: 2009004-003

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/1/2020 6:36:17 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 6:36:17 PM
Surr: DNOP	93.4	30.4-154		%Rec	1	9/1/2020 6:36:17 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/1/2020 12:23:28 PM
Surr: BFB	98.9	75.3-105		%Rec	1	9/1/2020 12:23:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/1/2020 12:23:28 PM
Toluene	ND	0.051		mg/Kg	1	9/1/2020 12:23:28 PM
Ethylbenzene	ND	0.051		mg/Kg	1	9/1/2020 12:23:28 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 12:23:28 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 12:23:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 8:07:37 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS04

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:10:00 AM

Lab ID: 2009004-004

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2020 7:00:39 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 7:00:39 PM
Surr: DNOP	94.7	30.4-154		%Rec	1	9/1/2020 7:00:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/1/2020 12:47:02 PM
Surr: BFB	97.9	75.3-105		%Rec	1	9/1/2020 12:47:02 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.026		mg/Kg	1	9/1/2020 12:47:02 PM
Toluene	ND	0.051		mg/Kg	1	9/1/2020 12:47:02 PM
Ethylbenzene	ND	0.051		mg/Kg	1	9/1/2020 12:47:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 12:47:02 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 12:47:02 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:20:02 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS05

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:15:00 AM

Lab ID: 2009004-005

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 7:25:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 7:25:08 PM
Surr: DNOP	96.1	30.4-154		%Rec	1	9/1/2020 7:25:08 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	9/1/2020 1:10:36 PM
Surr: BFB	96.5	75.3-105		%Rec	1	9/1/2020 1:10:36 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.027		mg/Kg	1	9/1/2020 1:10:36 PM
Toluene	ND	0.054		mg/Kg	1	9/1/2020 1:10:36 PM
Ethylbenzene	ND	0.054		mg/Kg	1	9/1/2020 1:10:36 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 1:10:36 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 1:10:36 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 8:32:27 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS06

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:19:00 AM

Lab ID: 2009004-006

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	9/1/2020 7:49:26 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 7:49:26 PM
Surr: DNOP	90.9	30.4-154		%Rec	1	9/1/2020 7:49:26 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/1/2020 1:34:07 PM
Surr: BFB	94.8	75.3-105		%Rec	1	9/1/2020 1:34:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 1:34:07 PM
Toluene	ND	0.037		mg/Kg	1	9/1/2020 1:34:07 PM
Ethylbenzene	ND	0.037		mg/Kg	1	9/1/2020 1:34:07 PM
Xylenes, Total	ND	0.074		mg/Kg	1	9/1/2020 1:34:07 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 1:34:07 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:44:51 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS07

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:21:00 AM

Lab ID: 2009004-007

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/1/2020 8:13:53 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 8:13:53 PM
Surr: DNOP	90.0	30.4-154		%Rec	1	9/1/2020 8:13:53 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 1:57:37 PM
Surr: BFB	97.9	75.3-105		%Rec	1	9/1/2020 1:57:37 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 1:57:37 PM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 1:57:37 PM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 1:57:37 PM
Xylenes, Total	ND	0.085		mg/Kg	1	9/1/2020 1:57:37 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 1:57:37 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 8:57:16 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS08

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:25:00 AM

Lab ID: 2009004-008

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 8:38:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 8:38:16 PM
Surr: DNOP	89.3	30.4-154		%Rec	1	9/1/2020 8:38:16 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	9/1/2020 2:21:18 PM
Surr: BFB	98.0	75.3-105		%Rec	1	9/1/2020 2:21:18 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 2:21:18 PM
Toluene	ND	0.044		mg/Kg	1	9/1/2020 2:21:18 PM
Ethylbenzene	ND	0.044		mg/Kg	1	9/1/2020 2:21:18 PM
Xylenes, Total	ND	0.089		mg/Kg	1	9/1/2020 2:21:18 PM
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	9/1/2020 2:21:18 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:09:40 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS09

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:30:00 AM

Lab ID: 2009004-009

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/1/2020 9:02:39 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2020 9:02:39 PM
Surr: DNOP	91.5	30.4-154		%Rec	1	9/1/2020 9:02:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/1/2020 2:44:52 PM
Surr: BFB	93.5	75.3-105		%Rec	1	9/1/2020 2:44:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 2:44:52 PM
Toluene	ND	0.040		mg/Kg	1	9/1/2020 2:44:52 PM
Ethylbenzene	ND	0.040		mg/Kg	1	9/1/2020 2:44:52 PM
Xylenes, Total	ND	0.081		mg/Kg	1	9/1/2020 2:44:52 PM
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	9/1/2020 2:44:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:22:04 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS10

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:38:00 AM

Lab ID: 2009004-010

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2020 9:27:14 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2020 9:27:14 PM
Surr: DNOP	89.9	30.4-154		%Rec	1	9/1/2020 9:27:14 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/1/2020 3:55:22 PM
Surr: BFB	97.3	75.3-105		%Rec	1	9/1/2020 3:55:22 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/1/2020 3:55:22 PM
Toluene	ND	0.049		mg/Kg	1	9/1/2020 3:55:22 PM
Ethylbenzene	ND	0.049		mg/Kg	1	9/1/2020 3:55:22 PM
Xylenes, Total	ND	0.098		mg/Kg	1	9/1/2020 3:55:22 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 3:55:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 9:59:17 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS11

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:42:00 AM

Lab ID: 2009004-011

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/1/2020 9:51:38 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2020 9:51:38 PM
Surr: DNOP	91.4	30.4-154		%Rec	1	9/1/2020 9:51:38 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/1/2020 4:18:52 PM
Surr: BFB	95.9	75.3-105		%Rec	1	9/1/2020 4:18:52 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 4:18:52 PM
Toluene	ND	0.046		mg/Kg	1	9/1/2020 4:18:52 PM
Ethylbenzene	ND	0.046		mg/Kg	1	9/1/2020 4:18:52 PM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2020 4:18:52 PM
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	9/1/2020 4:18:52 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/1/2020 10:11:41 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS12

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:46:00 AM

Lab ID: 2009004-012

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/1/2020 10:16:02 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 10:16:02 PM
Surr: DNOP	93.6	30.4-154		%Rec	1	9/1/2020 10:16:02 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/1/2020 4:42:21 PM
Surr: BFB	99.0	75.3-105		%Rec	1	9/1/2020 4:42:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 4:42:21 PM
Toluene	ND	0.042		mg/Kg	1	9/1/2020 4:42:21 PM
Ethylbenzene	ND	0.042		mg/Kg	1	9/1/2020 4:42:21 PM
Xylenes, Total	ND	0.084		mg/Kg	1	9/1/2020 4:42:21 PM
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	9/1/2020 4:42:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	61		mg/Kg	20	9/1/2020 10:24:06 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS13

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:50:00 AM

Lab ID: 2009004-013

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/1/2020 10:40:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 10:40:27 PM
Surr: DNOP	90.4	30.4-154		%Rec	1	9/1/2020 10:40:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/1/2020 5:05:51 PM
Surr: BFB	98.6	75.3-105		%Rec	1	9/1/2020 5:05:51 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/1/2020 5:05:51 PM
Toluene	ND	0.035		mg/Kg	1	9/1/2020 5:05:51 PM
Ethylbenzene	ND	0.035		mg/Kg	1	9/1/2020 5:05:51 PM
Xylenes, Total	ND	0.071		mg/Kg	1	9/1/2020 5:05:51 PM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/1/2020 5:05:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 10:36:30 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS14

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:55:00 AM

Lab ID: 2009004-014

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/1/2020 11:04:47 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/1/2020 11:04:47 PM
Surr: DNOP	91.6	30.4-154		%Rec	1	9/1/2020 11:04:47 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/1/2020 5:29:23 PM
Surr: BFB	96.8	75.3-105		%Rec	1	9/1/2020 5:29:23 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 5:29:23 PM
Toluene	ND	0.038		mg/Kg	1	9/1/2020 5:29:23 PM
Ethylbenzene	ND	0.038		mg/Kg	1	9/1/2020 5:29:23 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 5:29:23 PM
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	9/1/2020 5:29:23 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 10:48:54 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS15

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 10:57:00 AM

Lab ID: 2009004-015

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	24	9.5		mg/Kg	1	9/1/2020 11:29:09 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/1/2020 11:29:09 PM
Surr: DNOP	76.2	30.4-154		%Rec	1	9/1/2020 11:29:09 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.6		mg/Kg	1	9/1/2020 5:52:51 PM
Surr: BFB	95.4	75.3-105		%Rec	1	9/1/2020 5:52:51 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.028		mg/Kg	1	9/1/2020 5:52:51 PM
Toluene	ND	0.056		mg/Kg	1	9/1/2020 5:52:51 PM
Ethylbenzene	ND	0.056		mg/Kg	1	9/1/2020 5:52:51 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 5:52:51 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 5:52:51 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	250	60		mg/Kg	20	9/1/2020 11:01:19 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS16

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:00:00 AM

Lab ID: 2009004-016

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/1/2020 11:53:21 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/1/2020 11:53:21 PM
Surr: DNOP	75.9	30.4-154		%Rec	1	9/1/2020 11:53:21 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/1/2020 6:16:17 PM
Surr: BFB	97.4	75.3-105		%Rec	1	9/1/2020 6:16:17 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 6:16:17 PM
Toluene	ND	0.038		mg/Kg	1	9/1/2020 6:16:17 PM
Ethylbenzene	ND	0.038		mg/Kg	1	9/1/2020 6:16:17 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 6:16:17 PM
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	9/1/2020 6:16:17 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:13:44 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash FS17

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:05:00 AM

Lab ID: 2009004-017

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	48	9.6		mg/Kg	1	9/2/2020 12:17:47 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 12:17:47 AM
Surr: DNOP	87.8	30.4-154		%Rec	1	9/2/2020 12:17:47 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/1/2020 6:39:44 PM
Surr: BFB	96.9	75.3-105		%Rec	1	9/1/2020 6:39:44 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/1/2020 6:39:44 PM
Toluene	ND	0.036		mg/Kg	1	9/1/2020 6:39:44 PM
Ethylbenzene	ND	0.036		mg/Kg	1	9/1/2020 6:39:44 PM
Xylenes, Total	ND	0.072		mg/Kg	1	9/1/2020 6:39:44 PM
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	9/1/2020 6:39:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	150	60		mg/Kg	20	9/1/2020 11:26:09 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:20:00 AM

Lab ID: 2009004-018

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/2/2020 1:06:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 1:06:23 AM
Surr: DNOP	70.3	30.4-154		%Rec	1	9/2/2020 1:06:23 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/1/2020 7:03:08 PM
Surr: BFB	97.5	75.3-105		%Rec	1	9/1/2020 7:03:08 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.026		mg/Kg	1	9/1/2020 7:03:08 PM
Toluene	ND	0.052		mg/Kg	1	9/1/2020 7:03:08 PM
Ethylbenzene	ND	0.052		mg/Kg	1	9/1/2020 7:03:08 PM
Xylenes, Total	ND	0.10		mg/Kg	1	9/1/2020 7:03:08 PM
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	9/1/2020 7:03:08 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:38:34 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:24:00 AM

Lab ID: 2009004-019

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/2/2020 1:30:34 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2020 1:30:34 AM
Surr: DNOP	79.0	30.4-154		%Rec	1	9/2/2020 1:30:34 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/1/2020 7:26:29 PM
Surr: BFB	94.9	75.3-105		%Rec	1	9/1/2020 7:26:29 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 7:26:29 PM
Toluene	ND	0.041		mg/Kg	1	9/1/2020 7:26:29 PM
Ethylbenzene	ND	0.041		mg/Kg	1	9/1/2020 7:26:29 PM
Xylenes, Total	ND	0.081		mg/Kg	1	9/1/2020 7:26:29 PM
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	9/1/2020 7:26:29 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/1/2020 11:50:58 PM

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

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

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## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW03

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:29:00 AM

Lab ID: 2009004-020

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/2/2020 1:55:09 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/2/2020 1:55:09 AM
Surr: DNOP	68.9	30.4-154		%Rec	1	9/2/2020 1:55:09 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	59		mg/Kg	20	9/2/2020 12:28:12 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 4:09:03 PM
Toluene	ND	0.047		mg/Kg	1	9/1/2020 4:09:03 PM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2020 4:09:03 PM
Xylenes, Total	ND	0.094		mg/Kg	1	9/1/2020 4:09:03 PM
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	9/1/2020 4:09:03 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 4:09:03 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2020 4:09:03 PM
Surr: BFB	93.7	70-130		%Rec	1	9/1/2020 4:09:03 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW04

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:32:00 AM

Lab ID: 2009004-021

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	33	9.6		mg/Kg	1	9/2/2020 3:07:50 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 3:07:50 AM
Surr: DNOP	50.8	30.4-154		%Rec	1	9/2/2020 3:07:50 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 1:30:14 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.027		mg/Kg	1	9/1/2020 5:37:42 PM
Toluene	ND	0.054		mg/Kg	1	9/1/2020 5:37:42 PM
Ethylbenzene	ND	0.054		mg/Kg	1	9/1/2020 5:37:42 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 5:37:42 PM
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/1/2020 5:37:42 PM
Surr: Toluene-d8	103	70-130		%Rec	1	9/1/2020 5:37:42 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.4		mg/Kg	1	9/1/2020 5:37:42 PM
Surr: BFB	96.5	70-130		%Rec	1	9/1/2020 5:37:42 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW05

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:35:00 AM

Lab ID: 2009004-022

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/2/2020 4:20:36 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 4:20:36 AM
Surr: DNOP	58.4	30.4-154		%Rec	1	9/2/2020 4:20:36 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:07:28 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.028		mg/Kg	1	9/1/2020 7:06:05 PM
Toluene	ND	0.055		mg/Kg	1	9/1/2020 7:06:05 PM
Ethylbenzene	ND	0.055		mg/Kg	1	9/1/2020 7:06:05 PM
Xylenes, Total	ND	0.11		mg/Kg	1	9/1/2020 7:06:05 PM
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: Dibromofluoromethane	91.2	70-130		%Rec	1	9/1/2020 7:06:05 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 7:06:05 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.5		mg/Kg	1	9/1/2020 7:06:05 PM
Surr: BFB	95.0	70-130		%Rec	1	9/1/2020 7:06:05 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW06

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:40:00 AM

Lab ID: 2009004-023

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/2/2020 4:44:46 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/2/2020 4:44:46 AM
Surr: DNOP	52.3	30.4-154		%Rec	1	9/2/2020 4:44:46 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:19:53 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 7:35:33 PM
Toluene	ND	0.037		mg/Kg	1	9/1/2020 7:35:33 PM
Ethylbenzene	ND	0.037		mg/Kg	1	9/1/2020 7:35:33 PM
Xylenes, Total	ND	0.075		mg/Kg	1	9/1/2020 7:35:33 PM
Surr: 1,2-Dichloroethane-d4	94.0	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: Dibromofluoromethane	94.1	70-130		%Rec	1	9/1/2020 7:35:33 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 7:35:33 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/1/2020 7:35:33 PM
Surr: BFB	97.8	70-130		%Rec	1	9/1/2020 7:35:33 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW07

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:45:00 AM

Lab ID: 2009004-024

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/2/2020 5:08:56 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/2/2020 5:08:56 AM
Surr: DNOP	64.6	30.4-154		%Rec	1	9/2/2020 5:08:56 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 2:57:07 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 8:05:09 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 8:05:09 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 8:05:09 PM
Xylenes, Total	ND	0.078		mg/Kg	1	9/1/2020 8:05:09 PM
Surr: 1,2-Dichloroethane-d4	99.9	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/1/2020 8:05:09 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 8:05:09 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 8:05:09 PM
Surr: BFB	97.3	70-130		%Rec	1	9/1/2020 8:05:09 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW08

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:50:00 AM

Lab ID: 2009004-025

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	1200	90		mg/Kg	10	9/2/2020 5:33:02 AM
Motor Oil Range Organics (MRO)	910	450		mg/Kg	10	9/2/2020 5:33:02 AM
Surr: DNOP	0	30.4-154	S	%Rec	10	9/2/2020 5:33:02 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	490	60		mg/Kg	20	9/2/2020 3:09:32 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.10	D	mg/Kg	5	9/1/2020 8:34:37 PM
Toluene	ND	0.21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Ethylbenzene	ND	0.21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Xylenes, Total	ND	0.41	D	mg/Kg	5	9/1/2020 8:34:37 PM
Surr: 1,2-Dichloroethane-d4	100	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: 4-Bromofluorobenzene	99.7	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: Dibromofluoromethane	95.2	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
Surr: Toluene-d8	104	70-130	D	%Rec	5	9/1/2020 8:34:37 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	21	D	mg/Kg	5	9/1/2020 8:34:37 PM
Surr: BFB	97.6	70-130	D	%Rec	5	9/1/2020 8:34:37 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW09

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 11:54:00 AM

Lab ID: 2009004-026

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	17	9.1		mg/Kg	1	9/2/2020 5:57:09 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	9/2/2020 5:57:09 AM
Surr: DNOP	74.1	30.4-154		%Rec	1	9/2/2020 5:57:09 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 3:21:56 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 9:03:59 PM
Toluene	ND	0.043		mg/Kg	1	9/1/2020 9:03:59 PM
Ethylbenzene	ND	0.043		mg/Kg	1	9/1/2020 9:03:59 PM
Xylenes, Total	ND	0.085		mg/Kg	1	9/1/2020 9:03:59 PM
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	9/1/2020 9:03:59 PM
Surr: Toluene-d8	102	70-130		%Rec	1	9/1/2020 9:03:59 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	9/1/2020 9:03:59 PM
Surr: BFB	96.4	70-130		%Rec	1	9/1/2020 9:03:59 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW10

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:00:00 PM

Lab ID: 2009004-027

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	100	9.4		mg/Kg	1	9/2/2020 6:21:15 AM
Motor Oil Range Organics (MRO)	160	47		mg/Kg	1	9/2/2020 6:21:15 AM
Surr: DNOP	91.5	30.4-154		%Rec	1	9/2/2020 6:21:15 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	180	59		mg/Kg	20	9/2/2020 3:34:20 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/1/2020 9:33:31 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 9:33:31 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 9:33:31 PM
Xylenes, Total	ND	0.077		mg/Kg	1	9/1/2020 9:33:31 PM
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	9/1/2020 9:33:31 PM
Surr: Toluene-d8	105	70-130		%Rec	1	9/1/2020 9:33:31 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 9:33:31 PM
Surr: BFB	98.6	70-130		%Rec	1	9/1/2020 9:33:31 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW11

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:04:00 PM

Lab ID: 2009004-028

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/2/2020 6:45:39 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 6:45:39 AM
Surr: DNOP	70.2	30.4-154		%Rec	1	9/2/2020 6:45:39 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	68	60		mg/Kg	20	9/2/2020 3:46:44 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/1/2020 10:02:52 PM
Toluene	ND	0.039		mg/Kg	1	9/1/2020 10:02:52 PM
Ethylbenzene	ND	0.039		mg/Kg	1	9/1/2020 10:02:52 PM
Xylenes, Total	ND	0.079		mg/Kg	1	9/1/2020 10:02:52 PM
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	9/1/2020 10:02:52 PM
Surr: Toluene-d8	105	70-130		%Rec	1	9/1/2020 10:02:52 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/1/2020 10:02:52 PM
Surr: BFB	97.1	70-130		%Rec	1	9/1/2020 10:02:52 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW12

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:10:00 PM

Lab ID: 2009004-029

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	9/2/2020 7:09:44 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 7:09:44 AM
Surr: DNOP	73.9	30.4-154		%Rec	1	9/2/2020 7:09:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 3:59:08 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.022		mg/Kg	1	9/1/2020 10:32:28 PM
Toluene	ND	0.045		mg/Kg	1	9/1/2020 10:32:28 PM
Ethylbenzene	ND	0.045		mg/Kg	1	9/1/2020 10:32:28 PM
Xylenes, Total	ND	0.089		mg/Kg	1	9/1/2020 10:32:28 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: Dibromofluoromethane	98.9	70-130		%Rec	1	9/1/2020 10:32:28 PM
Surr: Toluene-d8	103	70-130		%Rec	1	9/1/2020 10:32:28 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/1/2020 10:32:28 PM
Surr: BFB	95.7	70-130		%Rec	1	9/1/2020 10:32:28 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW13

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:15:00 PM

Lab ID: 2009004-030

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	9/2/2020 7:35:14 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 7:35:14 AM
Surr: DNOP	70.4	30.4-154		%Rec	1	9/2/2020 7:35:14 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:11:32 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/1/2020 11:01:53 PM
Toluene	ND	0.041		mg/Kg	1	9/1/2020 11:01:53 PM
Ethylbenzene	ND	0.041		mg/Kg	1	9/1/2020 11:01:53 PM
Xylenes, Total	ND	0.083		mg/Kg	1	9/1/2020 11:01:53 PM
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	9/1/2020 11:01:53 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 11:01:53 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/1/2020 11:01:53 PM
Surr: BFB	96.8	70-130		%Rec	1	9/1/2020 11:01:53 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW14

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:20:00 PM

Lab ID: 2009004-031

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/2/2020 7:59:05 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 7:59:05 AM
Surr: DNOP	78.6	30.4-154		%Rec	1	9/2/2020 7:59:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:23:57 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/1/2020 11:31:21 PM
Toluene	ND	0.046		mg/Kg	1	9/1/2020 11:31:21 PM
Ethylbenzene	ND	0.046		mg/Kg	1	9/1/2020 11:31:21 PM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2020 11:31:21 PM
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	9/1/2020 11:31:21 PM
Surr: Toluene-d8	104	70-130		%Rec	1	9/1/2020 11:31:21 PM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/1/2020 11:31:21 PM
Surr: BFB	93.8	70-130		%Rec	1	9/1/2020 11:31:21 PM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW15

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:25:00 PM

Lab ID: 2009004-032

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/2/2020 8:23:10 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 8:23:10 AM
Surr: DNOP	79.7	30.4-154		%Rec	1	9/2/2020 8:23:10 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	61		mg/Kg	20	9/2/2020 4:36:22 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.021		mg/Kg	1	9/2/2020 12:00:52 AM
Toluene	ND	0.041		mg/Kg	1	9/2/2020 12:00:52 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/2/2020 12:00:52 AM
Xylenes, Total	ND	0.082		mg/Kg	1	9/2/2020 12:00:52 AM
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	9/2/2020 12:00:52 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 12:00:52 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/2/2020 12:00:52 AM
Surr: BFB	96.9	70-130		%Rec	1	9/2/2020 12:00:52 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW16

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:30:00 PM

Lab ID: 2009004-033

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/2/2020 8:47:13 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/2/2020 8:47:13 AM
Surr: DNOP	77.4	30.4-154		%Rec	1	9/2/2020 8:47:13 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 4:48:46 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.023		mg/Kg	1	9/2/2020 12:30:19 AM
Toluene	ND	0.046		mg/Kg	1	9/2/2020 12:30:19 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/2/2020 12:30:19 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/2/2020 12:30:19 AM
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: Dibromofluoromethane	96.1	70-130		%Rec	1	9/2/2020 12:30:19 AM
Surr: Toluene-d8	105	70-130		%Rec	1	9/2/2020 12:30:19 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/2/2020 12:30:19 AM
Surr: BFB	96.3	70-130		%Rec	1	9/2/2020 12:30:19 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW17

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 12:35:00 PM

Lab ID: 2009004-034

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	14	9.4		mg/Kg	1	9/2/2020 9:11:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/2/2020 9:11:23 AM
Surr: DNOP	77.8	30.4-154		%Rec	1	9/2/2020 9:11:23 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:25:59 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/2/2020 12:59:50 AM
Toluene	ND	0.041		mg/Kg	1	9/2/2020 12:59:50 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/2/2020 12:59:50 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/2/2020 12:59:50 AM
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: Dibromofluoromethane	97.0	70-130		%Rec	1	9/2/2020 12:59:50 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 12:59:50 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/2/2020 12:59:50 AM
Surr: BFB	98.3	70-130		%Rec	1	9/2/2020 12:59:50 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SP01

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 4:00:00 PM

Lab ID: 2009004-035

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	9/2/2020 9:35:29 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/2/2020 9:35:29 AM
Surr: DNOP	85.7	30.4-154		%Rec	1	9/2/2020 9:35:29 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:38:23 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/2/2020 3:27:16 AM
Toluene	ND	0.038		mg/Kg	1	9/2/2020 3:27:16 AM
Ethylbenzene	ND	0.038		mg/Kg	1	9/2/2020 3:27:16 AM
Xylenes, Total	ND	0.077		mg/Kg	1	9/2/2020 3:27:16 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: Dibromofluoromethane	100	70-130		%Rec	1	9/2/2020 3:27:16 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 3:27:16 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/2/2020 3:27:16 AM
Surr: BFB	94.3	70-130		%Rec	1	9/2/2020 3:27:16 AM

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

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



## Analytical Report

Lab Order 2009004

Date Reported: 9/9/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SP02

Project: Chaco 2308 03L 405H

Collection Date: 8/31/2020 4:15:00 PM

Lab ID: 2009004-036

Matrix: MEOH (SOIL)

Received Date: 9/1/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	9.5	8.7		mg/Kg	1	9/2/2020 9:59:39 AM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	9/2/2020 9:59:39 AM
Surr: DNOP	87.0	30.4-154		%Rec	1	9/2/2020 9:59:39 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/2/2020 5:50:47 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>RAA</b>
Benzene	ND	0.018		mg/Kg	1	9/2/2020 3:56:55 AM
Toluene	ND	0.036		mg/Kg	1	9/2/2020 3:56:55 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/2/2020 3:56:55 AM
Xylenes, Total	ND	0.072		mg/Kg	1	9/2/2020 3:56:55 AM
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: Dibromofluoromethane	94.8	70-130		%Rec	1	9/2/2020 3:56:55 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/2/2020 3:56:55 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/2/2020 3:56:55 AM
Surr: BFB	94.8	70-130		%Rec	1	9/2/2020 3:56:55 AM

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

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

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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>MB-54869</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54869</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499684</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54869</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54869</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499685</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Sample ID: <b>MB-54870</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54870</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499716</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54870</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54870</b>	RunNo: <b>71522</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499717</b>	Units: <b>mg/Kg</b>							
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			

**Qualifiers:**

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

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

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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>2009004-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash FS01</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499210</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.1	45.70	0	98.3	47.4	136			
Surr: DNOP	3.9		4.570		86.3	30.4	154			

Sample ID: <b>2009004-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash FS01</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499211</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	48.92	0	99.0	47.4	136	7.51	43.4	
Surr: DNOP	4.3		4.892		86.9	30.4	154	0	0	

Sample ID: <b>2009004-021AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash SW04</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499232</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	9.7	48.64	32.72	70.9	47.4	136			
Surr: DNOP	2.0		4.864		41.7	30.4	154			

Sample ID: <b>2009004-021AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>Wash SW04</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499233</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	130	9.5	47.30	32.72	208	47.4	136	64.6	43.4	RS
Surr: DNOP	2.6		4.730		55.4	30.4	154	0	0	

Sample ID: <b>LCS-54854</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54854</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499249</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	70	130			
Surr: DNOP	4.2		5.000		84.5	30.4	154			

Sample ID: <b>LCS-54857</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54857</b>	RunNo: <b>71526</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499250</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>LCS-54857</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54857</b>			RunNo: <b>71526</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>			SeqNo: <b>2499250</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	70	130			
Surr: DNOP	3.0		5.000		60.6	30.4	154			

Sample ID: <b>MB-54854</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54854</b>			RunNo: <b>71526</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/1/2020</b>			SeqNo: <b>2499251</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.0	30.4	154			

Sample ID: <b>MB-54857</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54857</b>			RunNo: <b>71526</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/2/2020</b>			SeqNo: <b>2499252</b>		Units: <b>mg/Kg</b>				
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	6.8		10.00		68.3	30.4	154			

Sample ID: <b>LCS-54907</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54907</b>			RunNo: <b>71526</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2502752</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	30.4	154			

Sample ID: <b>MB-54907</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54907</b>			RunNo: <b>71526</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2502753</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	13		10.00		126	30.4	154			

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498901</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.0	75.3	105			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498902</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	5.0	25.00	0	76.8	72.5	106			
Surr: BFB	1100		1000		105	75.3	105			S

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498939</b>		Units: <b>mg/Kg</b>					
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	0.99		1.000		98.8	80	120			

Sample ID: <b>100ng btex lcsb</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498940</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.3	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: <b>2009004-001ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>Wash FS01</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498961</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.022	0.8985	0	96.8	76.3	120			
Toluene	0.87	0.045	0.8985	0	96.8	78.5	120			
Ethylbenzene	0.88	0.045	0.8985	0	97.5	78.1	124			
Xylenes, Total	2.6	0.090	2.695	0	97.7	79.3	125			
Surr: 4-Bromofluorobenzene	0.96		0.8985		106	80	120			

Sample ID: <b>2009004-001amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>Wash FS01</b>	Batch ID: <b>R71524</b>		RunNo: <b>71524</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2498962</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.022	0.8985	0	96.0	76.3	120	0.820	20	
Toluene	0.87	0.045	0.8985	0	96.6	78.5	120	0.217	20	
Ethylbenzene	0.88	0.045	0.8985	0	98.2	78.1	124	0.664	20	
Xylenes, Total	2.7	0.090	2.695	0	98.7	79.3	125	1.09	20	
Surr: 4-Bromofluorobenzene	0.98		0.8985		109	80	120	0	0	

**Qualifiers:**

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

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



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

WO#: 2009004

09-Sep-20

**Client:** LTE**Project:** Chaco 2308 03L 405H

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499776</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.7	70	130			
Toluene	1.1	0.050	1.000	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		91.8	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.4	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.4	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: <b>2009004-020ams</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>Wash SW03</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499779</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.023	0.9381	0	92.3	67.9	137			
Toluene	1.0	0.047	0.9381	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.4690		91.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4690		95.6	70	130			
Surr: Dibromofluoromethane	0.44		0.4690		94.3	70	130			
Surr: Toluene-d8	0.50		0.4690		106	70	130			

Sample ID: <b>2009004-020amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>Wash SW03</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/2/2020</b>	SeqNo: <b>2499781</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.023	0.9381	0	87.0	67.9	137	5.91	20	
Toluene	0.95	0.047	0.9381	0	102	70	130	6.92	20	
Surr: 1,2-Dichloroethane-d4	0.43		0.4690		91.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4690		96.8	70	130	0	0	
Surr: Dibromofluoromethane	0.43		0.4690		92.5	70	130	0	0	
Surr: Toluene-d8	0.48		0.4690		102	70	130	0	0	

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>R71559</b>	RunNo: <b>71559</b>								
Prep Date:	Analysis Date: <b>9/1/2020</b>	SeqNo: <b>2499798</b>	Units: <b>mg/Kg</b>							
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								

**Qualifiers:**

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

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



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2009004  
09-Sep-20

Client: LTE  
Project: Chaco 2308 03L 405H

Sample ID: <b>mb1</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>PBS</b>		Batch ID: <b>R71559</b>		RunNo: <b>71559</b>						
Prep Date:		Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2499798</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		90.4	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

WO#: 2009004

09-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 03L 405H

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2499999</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.5	70	130			
Surr: BFB	470		500.0		93.5	70	130			

Sample ID: <b>2009004-021ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>Wash SW04</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500002</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.4	27.12	0	92.8	49.2	122			
Surr: BFB	530		542.3		97.8	70	130			

Sample ID: <b>2009004-021amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>Wash SW04</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500003</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.4	27.12	0	89.2	49.2	122	4.00	20	
Surr: BFB	510		542.3		93.5	70	130	0	0	

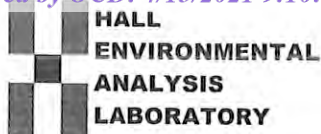
Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71559</b>		RunNo: <b>71559</b>							
Prep Date:	Analysis Date: <b>9/1/2020</b>		SeqNo: <b>2500019</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		99.1	70	130			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **LTE**Work Order Number: **2009004**RcptNo: **1**Received By: **Cheyenne Cason** 9/1/2020 8:00:00 AMCompleted By: **Isaiah Ortiz** 9/1/2020 8:22:38 AMReviewed By: **SPA 9.1.20 / 9:45**

I-OK

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JR 9/1/20

one 9/1/20

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good	Yes			
2	3.2	Good	Yes			

















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

September 11, 2020

Stuart Hyde

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX:

RE: Chaco 2308 3L 405H

OrderNo.: 2009304

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 25 sample(s) on 9/4/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW01

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:30:00 AM

Lab ID: 2009304-001

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 6:28:58 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:28:58 AM
Surr: DNOP	69.3	30.4-154		%Rec	1	9/6/2020 6:28:58 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 1:21:22 AM
Surr: BFB	93.9	75.3-105		%Rec	1	9/5/2020 1:21:22 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/5/2020 1:21:22 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 1:21:22 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 1:21:22 AM
Xylenes, Total	ND	0.080		mg/Kg	1	9/5/2020 1:21:22 AM
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	9/5/2020 1:21:22 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: MRA
Chloride	1000	60		mg/Kg	20	9/6/2020 4:00:29 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW02

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:33:00 AM

Lab ID: 2009304-002

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 7:41:43 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 7:41:43 AM
Surr: DNOP	65.4	30.4-154		%Rec	1	9/6/2020 7:41:43 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/5/2020 1:44:44 AM
Surr: BFB	94.2	75.3-105		%Rec	1	9/5/2020 1:44:44 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.019		mg/Kg	1	9/5/2020 1:44:44 AM
Toluene	ND	0.037		mg/Kg	1	9/5/2020 1:44:44 AM
Ethylbenzene	ND	0.037		mg/Kg	1	9/5/2020 1:44:44 AM
Xylenes, Total	ND	0.075		mg/Kg	1	9/5/2020 1:44:44 AM
Surr: 4-Bromofluorobenzene	98.0	80-120		%Rec	1	9/5/2020 1:44:44 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	280	60		mg/Kg	20	9/6/2020 11:47:02 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW03

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:36:00 AM

Lab ID: 2009304-003

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: mb
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/6/2020 8:30:18 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 8:30:18 AM
Surr: DNOP	78.1	30.4-154		%Rec	1	9/6/2020 8:30:18 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 2:08:15 AM
Surr: BFB	93.7	75.3-105		%Rec	1	9/5/2020 2:08:15 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: RAA
Benzene	ND	0.020		mg/Kg	1	9/5/2020 2:08:15 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 2:08:15 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 2:08:15 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/5/2020 2:08:15 AM
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	9/5/2020 2:08:15 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: CAS
Chloride	630	60		mg/Kg	20	9/6/2020 12:24:15 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW04

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:40:00 AM

Lab ID: 2009304-004

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 8:54:29 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 8:54:29 AM
Surr: DNOP	67.4	30.4-154		%Rec	1	9/6/2020 8:54:29 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/5/2020 2:31:51 AM
Surr: BFB	93.9	75.3-105		%Rec	1	9/5/2020 2:31:51 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>RAA</b>
Benzene	ND	0.020		mg/Kg	1	9/5/2020 2:31:51 AM
Toluene	ND	0.040		mg/Kg	1	9/5/2020 2:31:51 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/5/2020 2:31:51 AM
Xylenes, Total	ND	0.081		mg/Kg	1	9/5/2020 2:31:51 AM
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	9/5/2020 2:31:51 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	1000	60		mg/Kg	20	9/6/2020 1:01:27 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW05

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:43:00 AM

Lab ID: 2009304-005

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/6/2020 9:18:52 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 9:18:52 AM
Surr: DNOP	59.9	30.4-154		%Rec	1	9/6/2020 9:18:52 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/6/2020 3:22:31 AM
Surr: BFB	93.0	75.3-105		%Rec	1	9/6/2020 3:22:31 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.020		mg/Kg	1	9/6/2020 3:22:31 AM
Toluene	ND	0.040		mg/Kg	1	9/6/2020 3:22:31 AM
Ethylbenzene	ND	0.040		mg/Kg	1	9/6/2020 3:22:31 AM
Xylenes, Total	ND	0.080		mg/Kg	1	9/6/2020 3:22:31 AM
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	9/6/2020 3:22:31 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 1:13:52 PM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW06

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:46:00 AM

Lab ID: 2009304-006

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2020 9:43:07 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 9:43:07 AM
Surr: DNOP	68.1	30.4-154		%Rec	1	9/6/2020 9:43:07 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/6/2020 3:46:04 AM
Surr: BFB	95.2	75.3-105		%Rec	1	9/6/2020 3:46:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.018		mg/Kg	1	9/6/2020 3:46:04 AM
Toluene	ND	0.036		mg/Kg	1	9/6/2020 3:46:04 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/6/2020 3:46:04 AM
Xylenes, Total	ND	0.071		mg/Kg	1	9/6/2020 3:46:04 AM
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	9/6/2020 3:46:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 1:51:06 PM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW07

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:50:00 AM

Lab ID: 2009304-007

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2020 10:07:32 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 10:07:32 AM
Surr: DNOP	63.9	30.4-154		%Rec	1	9/6/2020 10:07:32 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	9/6/2020 4:09:26 AM
Surr: BFB	92.0	75.3-105		%Rec	1	9/6/2020 4:09:26 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	9/6/2020 4:09:26 AM
Toluene	ND	0.038		mg/Kg	1	9/6/2020 4:09:26 AM
Ethylbenzene	ND	0.038		mg/Kg	1	9/6/2020 4:09:26 AM
Xylenes, Total	ND	0.077		mg/Kg	1	9/6/2020 4:09:26 AM
Surr: 4-Bromofluorobenzene	97.2	80-120		%Rec	1	9/6/2020 4:09:26 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 2:03:30 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW08

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:53:00 AM

Lab ID: 2009304-008

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 10:31:48 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 10:31:48 AM
Surr: DNOP	97.3	30.4-154		%Rec	1	9/6/2020 10:31:48 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/6/2020 4:32:50 AM
Surr: BFB	96.1	75.3-105		%Rec	1	9/6/2020 4:32:50 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/6/2020 4:32:50 AM
Toluene	ND	0.050		mg/Kg	1	9/6/2020 4:32:50 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/6/2020 4:32:50 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/6/2020 4:32:50 AM
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	1	9/6/2020 4:32:50 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 2:15:55 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area SW09

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 10:56:00 AM

Lab ID: 2009304-009

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 10:56:24 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 10:56:24 AM
Surr: DNOP	77.3	30.4-154		%Rec	1	9/6/2020 10:56:24 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/6/2020 4:56:12 AM
Surr: BFB	95.5	75.3-105		%Rec	1	9/6/2020 4:56:12 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.017		mg/Kg	1	9/6/2020 4:56:12 AM
Toluene	ND	0.035		mg/Kg	1	9/6/2020 4:56:12 AM
Ethylbenzene	ND	0.035		mg/Kg	1	9/6/2020 4:56:12 AM
Xylenes, Total	ND	0.070		mg/Kg	1	9/6/2020 4:56:12 AM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/6/2020 4:56:12 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	270	60		mg/Kg	20	9/6/2020 2:28:19 PM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS01

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:20:00 AM

Lab ID: 2009304-010

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	9/6/2020 11:20:40 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 11:20:40 AM
Surr: DNOP	73.8	30.4-154		%Rec	1	9/6/2020 11:20:40 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	9/6/2020 5:20:04 AM
Surr: BFB	98.7	75.3-105		%Rec	1	9/6/2020 5:20:04 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.021		mg/Kg	1	9/6/2020 5:20:04 AM
Toluene	ND	0.043		mg/Kg	1	9/6/2020 5:20:04 AM
Ethylbenzene	ND	0.043		mg/Kg	1	9/6/2020 5:20:04 AM
Xylenes, Total	ND	0.085		mg/Kg	1	9/6/2020 5:20:04 AM
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	9/6/2020 5:20:04 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	220	60		mg/Kg	20	9/6/2020 2:40:43 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS02

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:23:00 AM

Lab ID: 2009304-011

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2020 11:45:05 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 11:45:05 AM
Surr: DNOP	75.3	30.4-154		%Rec	1	9/6/2020 11:45:05 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	9/6/2020 5:44:05 AM
Surr: BFB	98.1	75.3-105		%Rec	1	9/6/2020 5:44:05 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	9/6/2020 5:44:05 AM
Toluene	ND	0.051		mg/Kg	1	9/6/2020 5:44:05 AM
Ethylbenzene	ND	0.051		mg/Kg	1	9/6/2020 5:44:05 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/6/2020 5:44:05 AM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	9/6/2020 5:44:05 AM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	540	60		mg/Kg	20	9/6/2020 2:53:08 PM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS03

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:26:00 AM

Lab ID: 2009304-012

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:09:21 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:09:21 PM
Surr: DNOP	74.1	30.4-154		%Rec	1	9/6/2020 12:09:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	460	60		mg/Kg	20	9/6/2020 3:05:32 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 5:47:37 AM
Toluene	ND	0.046		mg/Kg	1	9/5/2020 5:47:37 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2020 5:47:37 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2020 5:47:37 AM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 5:47:37 AM
Surr: Toluene-d8	95.9	70-130		%Rec	1	9/5/2020 5:47:37 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2020 5:47:37 AM
Surr: BFB	103	70-130		%Rec	1	9/5/2020 5:47:37 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS04

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:29:00 AM

Lab ID: 2009304-013

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:33:44 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:33:44 PM
Surr: DNOP	71.6	30.4-154		%Rec	1	9/6/2020 12:33:44 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	230	60		mg/Kg	20	9/6/2020 3:17:57 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2020 6:16:05 AM
Toluene	ND	0.050		mg/Kg	1	9/5/2020 6:16:05 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/5/2020 6:16:05 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 6:16:05 AM
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	9/5/2020 6:16:05 AM
Surr: Toluene-d8	97.2	70-130		%Rec	1	9/5/2020 6:16:05 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/5/2020 6:16:05 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 6:16:05 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS05

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:32:00 AM

Lab ID: 2009304-014

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/6/2020 12:58:05 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/6/2020 12:58:05 PM
Surr: DNOP	53.6	30.4-154		%Rec	1	9/6/2020 12:58:05 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	490	60		mg/Kg	20	9/6/2020 3:30:21 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	9/5/2020 6:44:33 AM
Toluene	ND	0.050		mg/Kg	1	9/5/2020 6:44:33 AM
Ethylbenzene	ND	0.050		mg/Kg	1	9/5/2020 6:44:33 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 6:44:33 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 6:44:33 AM
Surr: Toluene-d8	95.3	70-130		%Rec	1	9/5/2020 6:44:33 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/5/2020 6:44:33 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 6:44:33 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS06

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:35:00 AM

Lab ID: 2009304-015

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/6/2020 1:22:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 1:22:33 PM
Surr: DNOP	65.7	30.4-154		%Rec	1	9/6/2020 1:22:33 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	9/6/2020 3:42:46 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.026		mg/Kg	1	9/5/2020 7:13:13 AM
Toluene	ND	0.052		mg/Kg	1	9/5/2020 7:13:13 AM
Ethylbenzene	ND	0.052		mg/Kg	1	9/5/2020 7:13:13 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 7:13:13 AM
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: Dibromofluoromethane	115	70-130		%Rec	1	9/5/2020 7:13:13 AM
Surr: Toluene-d8	96.4	70-130		%Rec	1	9/5/2020 7:13:13 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/5/2020 7:13:13 AM
Surr: BFB	106	70-130		%Rec	1	9/5/2020 7:13:13 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS07

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:38:00 AM

Lab ID: 2009304-016

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 1:46:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 1:46:59 PM
Surr: DNOP	85.9	30.4-154		%Rec	1	9/6/2020 1:46:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 4:20:00 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 7:41:52 AM
Toluene	ND	0.045		mg/Kg	1	9/5/2020 7:41:52 AM
Ethylbenzene	ND	0.045		mg/Kg	1	9/5/2020 7:41:52 AM
Xylenes, Total	ND	0.090		mg/Kg	1	9/5/2020 7:41:52 AM
Surr: 1,2-Dichloroethane-d4	95.3	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: Dibromofluoromethane	112	70-130		%Rec	1	9/5/2020 7:41:52 AM
Surr: Toluene-d8	97.1	70-130		%Rec	1	9/5/2020 7:41:52 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/5/2020 7:41:52 AM
Surr: BFB	110	70-130		%Rec	1	9/5/2020 7:41:52 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS08

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:41:00 AM

Lab ID: 2009304-017

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/6/2020 2:11:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2020 2:11:28 PM
Surr: DNOP	60.6	30.4-154		%Rec	1	9/6/2020 2:11:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	9/6/2020 4:32:24 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.023		mg/Kg	1	9/5/2020 8:10:22 AM
Toluene	ND	0.046		mg/Kg	1	9/5/2020 8:10:22 AM
Ethylbenzene	ND	0.046		mg/Kg	1	9/5/2020 8:10:22 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/5/2020 8:10:22 AM
Surr: 1,2-Dichloroethane-d4	96.8	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: Dibromofluoromethane	111	70-130		%Rec	1	9/5/2020 8:10:22 AM
Surr: Toluene-d8	94.5	70-130		%Rec	1	9/5/2020 8:10:22 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/5/2020 8:10:22 AM
Surr: BFB	105	70-130		%Rec	1	9/5/2020 8:10:22 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS09

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:44:00 AM

Lab ID: 2009304-018

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 2:35:48 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 2:35:48 PM
Surr: DNOP	68.2	30.4-154		%Rec	1	9/6/2020 2:35:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	9/6/2020 4:44:48 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.019		mg/Kg	1	9/5/2020 8:38:50 AM
Toluene	ND	0.037		mg/Kg	1	9/5/2020 8:38:50 AM
Ethylbenzene	ND	0.037		mg/Kg	1	9/5/2020 8:38:50 AM
Xylenes, Total	ND	0.074		mg/Kg	1	9/5/2020 8:38:50 AM
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: Dibromofluoromethane	110	70-130		%Rec	1	9/5/2020 8:38:50 AM
Surr: Toluene-d8	96.1	70-130		%Rec	1	9/5/2020 8:38:50 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/5/2020 8:38:50 AM
Surr: BFB	112	70-130		%Rec	1	9/5/2020 8:38:50 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS10

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:47:00 AM

Lab ID: 2009304-019

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 3:00:22 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 3:00:22 PM
Surr: DNOP	78.5	30.4-154		%Rec	1	9/6/2020 3:00:22 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 4:57:13 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	9/5/2020 9:07:20 AM
Toluene	ND	0.042		mg/Kg	1	9/5/2020 9:07:20 AM
Ethylbenzene	ND	0.042		mg/Kg	1	9/5/2020 9:07:20 AM
Xylenes, Total	ND	0.083		mg/Kg	1	9/5/2020 9:07:20 AM
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 9:07:20 AM
Surr: Toluene-d8	94.4	70-130		%Rec	1	9/5/2020 9:07:20 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	9/5/2020 9:07:20 AM
Surr: BFB	107	70-130		%Rec	1	9/5/2020 9:07:20 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS11

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:50:00 AM

Lab ID: 2009304-020

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2020 3:24:53 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 3:24:53 PM
Surr: DNOP	81.7	30.4-154		%Rec	1	9/6/2020 3:24:53 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 5:09:37 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.021		mg/Kg	1	9/5/2020 9:36:03 AM
Toluene	ND	0.041		mg/Kg	1	9/5/2020 9:36:03 AM
Ethylbenzene	ND	0.041		mg/Kg	1	9/5/2020 9:36:03 AM
Xylenes, Total	ND	0.082		mg/Kg	1	9/5/2020 9:36:03 AM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: Dibromofluoromethane	109	70-130		%Rec	1	9/5/2020 9:36:03 AM
Surr: Toluene-d8	95.3	70-130		%Rec	1	9/5/2020 9:36:03 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/5/2020 9:36:03 AM
Surr: BFB	106	70-130		%Rec	1	9/5/2020 9:36:03 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS12

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:53:00 AM

Lab ID: 2009304-021

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 5:02:28 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 5:02:28 PM
Surr: DNOP	82.0	30.4-154		%Rec	1	9/6/2020 5:02:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	9/6/2020 5:22:01 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.020		mg/Kg	1	9/5/2020 4:29:46 AM
Toluene	ND	0.039		mg/Kg	1	9/5/2020 4:29:46 AM
Ethylbenzene	ND	0.039		mg/Kg	1	9/5/2020 4:29:46 AM
Xylenes, Total	ND	0.078		mg/Kg	1	9/5/2020 4:29:46 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: Dibromofluoromethane	101	70-130		%Rec	1	9/5/2020 4:29:46 AM
Surr: Toluene-d8	102	70-130		%Rec	1	9/5/2020 4:29:46 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	9/5/2020 4:29:46 AM
Surr: BFB	96.7	70-130		%Rec	1	9/5/2020 4:29:46 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS13

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:56:00 AM

Lab ID: 2009304-022

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/6/2020 6:15:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:15:59 PM
Surr: DNOP	65.2	30.4-154		%Rec	1	9/6/2020 6:15:59 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 9:59:23 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	9/5/2020 5:59:03 AM
Toluene	ND	0.048		mg/Kg	1	9/5/2020 5:59:03 AM
Ethylbenzene	ND	0.048		mg/Kg	1	9/5/2020 5:59:03 AM
Xylenes, Total	ND	0.096		mg/Kg	1	9/5/2020 5:59:03 AM
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: Dibromofluoromethane	94.4	70-130		%Rec	1	9/5/2020 5:59:03 AM
Surr: Toluene-d8	106	70-130		%Rec	1	9/5/2020 5:59:03 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/5/2020 5:59:03 AM
Surr: BFB	95.8	70-130		%Rec	1	9/5/2020 5:59:03 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SW Area FS14

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 11:59:00 AM

Lab ID: 2009304-023

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/6/2020 6:40:26 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 6:40:26 PM
Surr: DNOP	76.4	30.4-154		%Rec	1	9/6/2020 6:40:26 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	150	60		mg/Kg	20	9/8/2020 10:36:27 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.026		mg/Kg	1	9/5/2020 7:27:30 AM
Toluene	ND	0.052		mg/Kg	1	9/5/2020 7:27:30 AM
Ethylbenzene	ND	0.052		mg/Kg	1	9/5/2020 7:27:30 AM
Xylenes, Total	ND	0.10		mg/Kg	1	9/5/2020 7:27:30 AM
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: Dibromofluoromethane	98.7	70-130		%Rec	1	9/5/2020 7:27:30 AM
Surr: Toluene-d8	104	70-130		%Rec	1	9/5/2020 7:27:30 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.2		mg/Kg	1	9/5/2020 7:27:30 AM
Surr: BFB	94.7	70-130		%Rec	1	9/5/2020 7:27:30 AM

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

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



## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW08-B

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 12:25:00 PM

Lab ID: 2009304-024

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2020 7:04:56 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2020 7:04:56 PM
Surr: DNOP	57.6	30.4-154		%Rec	1	9/6/2020 7:04:56 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 11:13:28 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.018		mg/Kg	1	9/5/2020 7:57:04 AM
Toluene	ND	0.036		mg/Kg	1	9/5/2020 7:57:04 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/5/2020 7:57:04 AM
Xylenes, Total	ND	0.072		mg/Kg	1	9/5/2020 7:57:04 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	9/5/2020 7:57:04 AM
Surr: Toluene-d8	103	70-130		%Rec	1	9/5/2020 7:57:04 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/5/2020 7:57:04 AM
Surr: BFB	93.4	70-130		%Rec	1	9/5/2020 7:57:04 AM

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

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

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## Analytical Report

Lab Order 2009304

Date Reported: 9/11/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: Wash SW10-B

Project: Chaco 2308 3L 405H

Collection Date: 9/3/2020 12:30:00 PM

Lab ID: 2009304-025

Matrix: MEOH (SOIL)

Received Date: 9/4/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/6/2020 7:29:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/6/2020 7:29:30 PM
Surr: DNOP	73.6	30.4-154		%Rec	1	9/6/2020 7:29:30 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>CJS</b>
Chloride	ND	60		mg/Kg	20	9/8/2020 11:25:49 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>						Analyst: <b>DJF</b>
Benzene	ND	0.018		mg/Kg	1	9/5/2020 8:27:10 AM
Toluene	ND	0.036		mg/Kg	1	9/5/2020 8:27:10 AM
Ethylbenzene	ND	0.036		mg/Kg	1	9/5/2020 8:27:10 AM
Xylenes, Total	ND	0.073		mg/Kg	1	9/5/2020 8:27:10 AM
Surr: 1,2-Dichloroethane-d4	99.4	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	9/5/2020 8:27:10 AM
Surr: Toluene-d8	103	70-130		%Rec	1	9/5/2020 8:27:10 AM
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>						Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	9/5/2020 8:27:10 AM
Surr: BFB	93.5	70-130		%Rec	1	9/5/2020 8:27:10 AM

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>MB-54979</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54979</b>	RunNo: <b>71656</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2505307</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54979</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54979</b>	RunNo: <b>71656</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2505308</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	90	110			

Sample ID: <b>MB-54983</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54983</b>	RunNo: <b>71671</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2506197</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-54983</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54983</b>	RunNo: <b>71671</b>								
Prep Date: <b>9/5/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2506198</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	90	110			

Sample ID: <b>MB-55006</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55006</b>	RunNo: <b>71685</b>								
Prep Date: <b>9/8/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506856</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-55006</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55006</b>	RunNo: <b>71685</b>								
Prep Date: <b>9/8/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506857</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

**Qualifiers:**

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

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>LCS-54951</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54951</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505398</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		79.7	30.4	154			

Sample ID: <b>LCS-54955</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54955</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505399</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.9		5.000		77.3	30.4	154			

Sample ID: <b>LCS-54958</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54958</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>			SeqNo: <b>2505400</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.2	70	130			
Surr: DNOP	2.2		5.000		43.5	30.4	154			

Sample ID: <b>LCS-54959</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54959</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>			SeqNo: <b>2505401</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	99.0	70	130			
Surr: DNOP	3.6		5.000		71.3	30.4	154			

Sample ID: <b>MB-54951</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54951</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505403</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		84.3	30.4	154			

Sample ID: <b>MB-54955</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54955</b>			RunNo: <b>71657</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505404</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3		10.00		82.6	30.4	154			

**Qualifiers:**

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

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

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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>MB-54958</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505405</b>			Units: <b>mg/Kg</b>					
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	5.6		10.00		56.0	30.4	154			

Sample ID: <b>MB-54959</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54959</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505406</b>			Units: <b>mg/Kg</b>					
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	7.9		10.00		79.3	30.4	154			

Sample ID: <b>2009304-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area SW01</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505513</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.9	49.50	0	115	47.4	136			
Surr: DNOP	3.4		4.950		69.6	30.4	154			

Sample ID: <b>2009304-021AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>54959</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505515</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.3	46.51	0	92.0	47.4	136			
Surr: DNOP	3.0		4.651		65.1	30.4	154			

Sample ID: <b>2009304-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SW Area SW01</b>	Batch ID: <b>54958</b>	RunNo: <b>71657</b>								
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/6/2020</b>	SeqNo: <b>2505521</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.9	49.31	0	123	47.4	136	6.14	43.4	
Surr: DNOP	3.8		4.931		77.9	30.4	154	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 2009304  
11-Sep-20

Client: LTE  
Project: Chaco 2308 3L 405H

Sample ID: 2009304-021AMSD		SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: SW Area FS12		Batch ID: 54959		RunNo: 71657						
Prep Date: 9/4/2020		Analysis Date: 9/6/2020		SeqNo: 2505522		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.1	45.58	0	82.7	47.4	136	12.7	43.4	
Surr: DNOP	2.7		4.558		58.9	30.4	154	0	0	

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>ics-54867</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54867</b>			RunNo: <b>71646</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2504664</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.3	72.5	106			
Surr: BFB	1100		1000		109	75.3	105			S

Sample ID: <b>mb-54867</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54867</b>			RunNo: <b>71646</b>						
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>			SeqNo: <b>2504666</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	75.3	105			

Sample ID: <b>mb-54909</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54909</b>			RunNo: <b>71654</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505130</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.3	75.3	105			

Sample ID: <b>ics-54909</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54909</b>			RunNo: <b>71654</b>						
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>			SeqNo: <b>2505131</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.2	72.5	106			
Surr: BFB	1100		1000		108	75.3	105			S

Sample ID: <b>mb-54964</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506602</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.0	75.3	105			

Sample ID: <b>ics-54964</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506603</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	75.3	105			S

**Qualifiers:**

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H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>LCS-54867</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54867</b>	RunNo: <b>71646</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504717</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.6	80	120			
Toluene	0.93	0.050	1.000	0	92.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: <b>mb-54867</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54867</b>	RunNo: <b>71646</b>								
Prep Date: <b>9/1/2020</b>	Analysis Date: <b>9/4/2020</b>	SeqNo: <b>2504719</b> Units: <b>mg/Kg</b>								
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		100	80	120			

Sample ID: <b>mb-54909</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54909</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506639</b> Units: <b>mg/Kg</b>								
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		101	80	120			

Sample ID: <b>lcs-54909</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>54909</b>	RunNo: <b>71681</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/8/2020</b>	SeqNo: <b>2506640</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.5	80	120			
Toluene	0.86	0.050	1.000	0	85.9	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.2	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

**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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb-54964</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506653</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		97.8	80	120			

Sample ID: <b>LCS-54964</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>54964</b>			RunNo: <b>71681</b>						
Prep Date: <b>9/4/2020</b>	Analysis Date: <b>9/8/2020</b>			SeqNo: <b>2506654</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.98		1.000		98.1	80	120			

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>PBS</b>	Batch ID: <b>S71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504224</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.4	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		95.2	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>S71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504225</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.6	70	130			
Toluene	1.0	0.050	1.000	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.1	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.7	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: <b>2009304-021ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504227</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.020	0.7843	0	92.3	67.9	137			
Toluene	0.83	0.039	0.7843	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	0.36		0.3922		92.8	70	130			
Surr: 4-Bromofluorobenzene	0.37		0.3922		94.0	70	130			
Surr: Dibromofluoromethane	0.38		0.3922		96.4	70	130			
Surr: Toluene-d8	0.41		0.3922		104	70	130			

Sample ID: <b>2009304-021amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>							
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504228</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.020	0.7843	0	86.8	67.9	137	6.14	20	
Toluene	0.79	0.039	0.7843	0	100	70	130	4.62	20	

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>2009304-021amsd</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>SW Area FS12</b>	Batch ID: <b>S71640</b>	RunNo: <b>71640</b>								
Prep Date:	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504228</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.37		0.3922		94.4	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.36		0.3922		91.9	70	130	0	0	
Surr: Dibromofluoromethane	0.37		0.3922		94.7	70	130	0	0	
Surr: Toluene-d8	0.40		0.3922		101	70	130	0	0	

Sample ID: <b>mb-54944</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54944</b>	RunNo: <b>71645</b>								
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504612</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		97.0	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.5	70	130			
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.46		0.5000		91.8	70	130			

Sample ID: <b>Ics-54944</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>54944</b>	RunNo: <b>71645</b>								
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504722</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.3	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.8	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.47		0.5000		93.6	70	130			

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>	RunNo: <b>71651</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504912</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.2	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.4	70	130			

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>	RunNo: <b>71651</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504912</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	0.56		0.5000		112	70	130			
Surr: Toluene-d8	0.48		0.5000		96.6	70	130			

Sample ID: <b>lcs-54900</b>	SampType: <b>LCS4</b>	TestCode: <b>EPA Method 8260B: Volatiles Short List</b>								
Client ID: <b>BatchQC</b>	Batch ID: <b>54900</b>	RunNo: <b>71651</b>								
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>	SeqNo: <b>2504913</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.0	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Dibromofluoromethane	0.54		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		95.1	70	130			

**Qualifiers:**

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

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>mb1</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504255</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		94.4	70	130			

Sample ID: <b>2.5ug gro lcs</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/4/2020</b>		SeqNo: <b>2504256</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.9	70	130			
Surr: BFB	470		500.0		94.0	70	130			

Sample ID: <b>2009304-022ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>SW Area FS13</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504259</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	24.02	0	85.6	49.2	122			
Surr: BFB	440		480.3		92.0	70	130			

Sample ID: <b>2009304-022amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>SW Area FS13</b>	Batch ID: <b>G71640</b>		RunNo: <b>71640</b>							
Prep Date:	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504260</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.02	0	83.6	49.2	122	2.41	20	
Surr: BFB	440		480.3		92.2	70	130	0	0	

Sample ID: <b>mb-54944</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>54944</b>		RunNo: <b>71645</b>							
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504782</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		103	70	130			

Sample ID: <b>lcs-54944</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54944</b>		RunNo: <b>71645</b>							
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504783</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2009304

11-Sep-20

**Client:** LTE  
**Project:** Chaco 2308 3L 405H

Sample ID: <b>ics-54944</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54944</b>		RunNo: <b>71645</b>							
Prep Date: <b>9/3/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504783</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.6	70	130			
Surr: BFB	530		500.0		107	70	130			

Sample ID: <b>mb-54900</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>54900</b>		RunNo: <b>71651</b>							
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504946</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	520		500.0		105	70	130			

Sample ID: <b>ics-54900</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>54900</b>		RunNo: <b>71651</b>							
Prep Date: <b>9/2/2020</b>	Analysis Date: <b>9/5/2020</b>		SeqNo: <b>2504947</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	540		500.0		107	70	130			

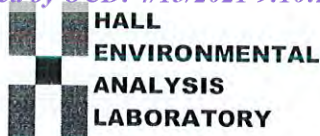
**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
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B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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

## Sample Log-In Check List

Client Name: **LTE**Work Order Number: **2009304**RcptNo: **1**Received By: **Cheyenne Cason** **9/4/2020 8:00:00 AM**Completed By: **Isaiah Ortiz** **9/4/2020 8:34:01 AM**Reviewed By: *LB* *9/4/20* *IOX*

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: *cmc 9/4/20*

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			
2	1.1	Good	Yes			



Released to Imaging: 3/28/2022 11:13:12 AM

## Analysis Request

Received by OCD: 4/13/2021 9:10:25 AM



Released to Imaging: 3/28/2022 11:13:12 AM

☐ Standard ☒ Rush Next Day

2009304

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

[illegible]

Received by:	Via:	Date	Time
Chae	Cum	9/14/20	0800



Released to Imaging: 3/28/2022 11:13:12 AM

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/3	1340	Eric Carroo	[Signature]		9/3/2020	1340
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9/3/2020	1910	Christina Lee	Carmen	Car	9/4/20	0800

Remarks:





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

October 28, 2020

Stuart Hyde

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX:

RE: Chaco 2308

OrderNo.: 2010957

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 28 sample(s) on 10/21/2020 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH01 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/19/2020 11:50:00 AM

Lab ID: 2010957-001

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	360	59		mg/Kg	20	10/24/2020 2:46:45 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 3:07:39 AM	55960
Surr: BFB	95.6	70-130		%Rec	1	10/23/2020 3:07:39 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/22/2020 10:42:31 AM	55965
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/22/2020 10:42:31 AM	55965
Surr: DNOP	101	30.4-154		%Rec	1	10/22/2020 10:42:31 AM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 3:07:39 AM	55960
Toluene	ND	0.047		mg/Kg	1	10/23/2020 3:07:39 AM	55960
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 3:07:39 AM	55960
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2020 3:07:39 AM	55960
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	10/23/2020 3:07:39 AM	55960
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	10/23/2020 3:07:39 AM	55960
Surr: Dibromofluoromethane	109	70-130		%Rec	1	10/23/2020 3:07:39 AM	55960
Surr: Toluene-d8	103	70-130		%Rec	1	10/23/2020 3:07:39 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH01 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 12:00:00 PM

Lab ID: 2010957-002

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	61		mg/Kg	20	10/24/2020 3:23:58 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 4:36:51 AM	55960
Surr: BFB	94.9	70-130		%Rec	1	10/23/2020 4:36:51 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/22/2020 11:54:54 AM	55965
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/22/2020 11:54:54 AM	55965
Surr: DNOP	96.1	30.4-154		%Rec	1	10/22/2020 11:54:54 AM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 4:36:51 AM	55960
Toluene	ND	0.049		mg/Kg	1	10/23/2020 4:36:51 AM	55960
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 4:36:51 AM	55960
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 4:36:51 AM	55960
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	10/23/2020 4:36:51 AM	55960
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	10/23/2020 4:36:51 AM	55960
Surr: Dibromofluoromethane	111	70-130		%Rec	1	10/23/2020 4:36:51 AM	55960
Surr: Toluene-d8	104	70-130		%Rec	1	10/23/2020 4:36:51 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH02 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/19/2020 12:20:00 PM

Lab ID: 2010957-003

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	59	59		mg/Kg	20	10/24/2020 3:36:22 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 5:06:26 AM	55960
Surr: BFB	94.0	70-130		%Rec	1	10/23/2020 5:06:26 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/22/2020 12:18:54 PM	55965
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/22/2020 12:18:54 PM	55965
Surr: DNOP	114	30.4-154		%Rec	1	10/22/2020 12:18:54 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 5:06:26 AM	55960
Toluene	ND	0.049		mg/Kg	1	10/23/2020 5:06:26 AM	55960
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 5:06:26 AM	55960
Xylenes, Total	ND	0.097		mg/Kg	1	10/23/2020 5:06:26 AM	55960
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	10/23/2020 5:06:26 AM	55960
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	10/23/2020 5:06:26 AM	55960
Surr: Dibromofluoromethane	108	70-130		%Rec	1	10/23/2020 5:06:26 AM	55960
Surr: Toluene-d8	105	70-130		%Rec	1	10/23/2020 5:06:26 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH02 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 12:30:00 PM

Lab ID: 2010957-004

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/24/2020 3:48:47 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/23/2020 5:36:13 AM	55960
Surr: BFB	95.4	70-130		%Rec	1	10/23/2020 5:36:13 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/22/2020 12:43:05 PM	55965
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/22/2020 12:43:05 PM	55965
Surr: DNOP	102	30.4-154		%Rec	1	10/22/2020 12:43:05 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 5:36:13 AM	55960
Toluene	ND	0.048		mg/Kg	1	10/23/2020 5:36:13 AM	55960
Ethylbenzene	ND	0.048		mg/Kg	1	10/23/2020 5:36:13 AM	55960
Xylenes, Total	ND	0.096		mg/Kg	1	10/23/2020 5:36:13 AM	55960
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	10/23/2020 5:36:13 AM	55960
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	10/23/2020 5:36:13 AM	55960
Surr: Dibromofluoromethane	105	70-130		%Rec	1	10/23/2020 5:36:13 AM	55960
Surr: Toluene-d8	104	70-130		%Rec	1	10/23/2020 5:36:13 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH03 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/19/2020 1:10:00 PM

Lab ID: 2010957-005

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	60	60		mg/Kg	20	10/24/2020 4:01:12 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2020 6:06:00 AM	55960
Surr: BFB	93.9	70-130		%Rec	1	10/23/2020 6:06:00 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	10/22/2020 1:07:14 PM	55965
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/22/2020 1:07:14 PM	55965
Surr: DNOP	97.6	30.4-154		%Rec	1	10/22/2020 1:07:14 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 6:06:00 AM	55960
Toluene	ND	0.050		mg/Kg	1	10/23/2020 6:06:00 AM	55960
Ethylbenzene	ND	0.050		mg/Kg	1	10/23/2020 6:06:00 AM	55960
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 6:06:00 AM	55960
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	10/23/2020 6:06:00 AM	55960
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	10/23/2020 6:06:00 AM	55960
Surr: Dibromofluoromethane	108	70-130		%Rec	1	10/23/2020 6:06:00 AM	55960
Surr: Toluene-d8	104	70-130		%Rec	1	10/23/2020 6:06:00 AM	55960

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH03 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 1:15:00 PM

Lab ID: 2010957-006

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	10/24/2020 4:13:36 AM	56009
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 6:35:33 AM	55960
Surr: BFB	93.4	70-130		%Rec	1	10/23/2020 6:35:33 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	0.095		mg/Kg	1	10/22/2020 1:31:20 PM	55965
Motor Oil Range Organics (MRO)	ND	0.47		mg/Kg	1	10/22/2020 1:31:20 PM	55965
Surr: DNOP	103	30.4-154		%Rec	1	10/22/2020 1:31:20 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 6:35:33 AM	55960
Toluene	ND	0.047		mg/Kg	1	10/23/2020 6:35:33 AM	55960
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 6:35:33 AM	55960
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2020 6:35:33 AM	55960
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	10/23/2020 6:35:33 AM	55960
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	10/23/2020 6:35:33 AM	55960
Surr: Dibromofluoromethane	108	70-130		%Rec	1	10/23/2020 6:35:33 AM	55960
Surr: Toluene-d8	105	70-130		%Rec	1	10/23/2020 6:35:33 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH04 @ 7.5-10'

Project: Chaco 2308

Collection Date: 10/19/2020 1:40:00 PM

Lab ID: 2010957-007

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	64	60		mg/Kg	20	10/27/2020 11:53:40 AM	56055
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 7:05:14 AM	55960
Surr: BFB	89.7	70-130		%Rec	1	10/23/2020 7:05:14 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	10/22/2020 1:55:26 PM	55965
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/22/2020 1:55:26 PM	55965
Surr: DNOP	112	30.4-154		%Rec	1	10/22/2020 1:55:26 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 7:05:14 AM	55960
Toluene	ND	0.049		mg/Kg	1	10/23/2020 7:05:14 AM	55960
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 7:05:14 AM	55960
Xylenes, Total	ND	0.097		mg/Kg	1	10/23/2020 7:05:14 AM	55960
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	10/23/2020 7:05:14 AM	55960
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	10/23/2020 7:05:14 AM	55960
Surr: Dibromofluoromethane	111	70-130		%Rec	1	10/23/2020 7:05:14 AM	55960
Surr: Toluene-d8	101	70-130		%Rec	1	10/23/2020 7:05:14 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH04 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 1:50:00 PM

Lab ID: 2010957-008

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 12:30:54 PM	56055
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 7:34:53 AM	55960
Surr: BFB	92.2	70-130		%Rec	1	10/23/2020 7:34:53 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/22/2020 2:19:42 PM	55965
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/22/2020 2:19:42 PM	55965
Surr: DNOP	95.9	30.4-154		%Rec	1	10/22/2020 2:19:42 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 7:34:53 AM	55960
Toluene	ND	0.049		mg/Kg	1	10/23/2020 7:34:53 AM	55960
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 7:34:53 AM	55960
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 7:34:53 AM	55960
Surr: 1,2-Dichloroethane-d4	99.5	70-130		%Rec	1	10/23/2020 7:34:53 AM	55960
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	10/23/2020 7:34:53 AM	55960
Surr: Dibromofluoromethane	106	70-130		%Rec	1	10/23/2020 7:34:53 AM	55960
Surr: Toluene-d8	102	70-130		%Rec	1	10/23/2020 7:34:53 AM	55960

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH05 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/19/2020 2:20:00 PM

Lab ID: 2010957-009

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 2:22:36 PM	56055
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 8:04:30 AM	55960
Surr: BFB	94.3	70-130		%Rec	1	10/23/2020 8:04:30 AM	55960
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	10/22/2020 2:43:48 PM	55965
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/22/2020 2:43:48 PM	55965
Surr: DNOP	99.1	30.4-154		%Rec	1	10/22/2020 2:43:48 PM	55965
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 8:04:30 AM	55960
Toluene	ND	0.049		mg/Kg	1	10/23/2020 8:04:30 AM	55960
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 8:04:30 AM	55960
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 8:04:30 AM	55960
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	10/23/2020 8:04:30 AM	55960
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	10/23/2020 8:04:30 AM	55960
Surr: Dibromofluoromethane	109	70-130		%Rec	1	10/23/2020 8:04:30 AM	55960
Surr: Toluene-d8	102	70-130		%Rec	1	10/23/2020 8:04:30 AM	55960

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH05 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 2:26:00 PM

Lab ID: 2010957-010

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	10/27/2020 2:35:00 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/23/2020 3:19:33 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 3:19:33 PM	55973
Surr: DNOP	84.9	30.4-154		%Rec	1	10/23/2020 3:19:33 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/23/2020 2:25:31 PM	55969
Surr: BFB	98.8	75.3-105		%Rec	1	10/23/2020 2:25:31 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 2:25:31 PM	55969
Toluene	ND	0.048		mg/Kg	1	10/23/2020 2:25:31 PM	55969
Ethylbenzene	ND	0.048		mg/Kg	1	10/23/2020 2:25:31 PM	55969
Xylenes, Total	ND	0.097		mg/Kg	1	10/23/2020 2:25:31 PM	55969
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/23/2020 2:25:31 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH06 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/19/2020 3:00:00 PM

Lab ID: 2010957-011

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 2:47:25 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/23/2020 3:49:05 PM	55973
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/23/2020 3:49:05 PM	55973
Surr: DNOP	74.2	30.4-154		%Rec	1	10/23/2020 3:49:05 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/23/2020 3:35:49 PM	55969
Surr: BFB	95.3	75.3-105		%Rec	1	10/23/2020 3:35:49 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 3:35:49 PM	55969
Toluene	ND	0.048		mg/Kg	1	10/23/2020 3:35:49 PM	55969
Ethylbenzene	ND	0.048		mg/Kg	1	10/23/2020 3:35:49 PM	55969
Xylenes, Total	ND	0.097		mg/Kg	1	10/23/2020 3:35:49 PM	55969
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/23/2020 3:35:49 PM	55969

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH06 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/19/2020 3:10:00 PM

Lab ID: 2010957-012

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 2:59:50 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/23/2020 3:58:53 PM	55973
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/23/2020 3:58:53 PM	55973
Surr: DNOP	77.2	30.4-154		%Rec	1	10/23/2020 3:58:53 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2020 4:47:42 PM	55969
Surr: BFB	98.3	75.3-105		%Rec	1	10/23/2020 4:47:42 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 4:47:42 PM	55969
Toluene	ND	0.050		mg/Kg	1	10/23/2020 4:47:42 PM	55969
Ethylbenzene	ND	0.050		mg/Kg	1	10/23/2020 4:47:42 PM	55969
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 4:47:42 PM	55969
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	10/23/2020 4:47:42 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH07 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/20/2020 9:40:00 AM

Lab ID: 2010957-013

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	730	60		mg/Kg	20	10/27/2020 3:12:14 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/23/2020 4:08:38 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 4:08:38 PM	55973
Surr: DNOP	102	30.4-154		%Rec	1	10/23/2020 4:08:38 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 5:11:27 PM	55969
Surr: BFB	94.9	75.3-105		%Rec	1	10/23/2020 5:11:27 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 5:11:27 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 5:11:27 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 5:11:27 PM	55969
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 5:11:27 PM	55969
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/23/2020 5:11:27 PM	55969

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH07 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/20/2020 10:00:00 AM

Lab ID: 2010957-014

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	400	60		mg/Kg	20	10/27/2020 3:24:39 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/23/2020 4:18:22 PM	55973
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/23/2020 4:18:22 PM	55973
Surr: DNOP	96.4	30.4-154		%Rec	1	10/23/2020 4:18:22 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 5:34:45 PM	55969
Surr: BFB	94.4	75.3-105		%Rec	1	10/23/2020 5:34:45 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 5:34:45 PM	55969
Toluene	ND	0.047		mg/Kg	1	10/23/2020 5:34:45 PM	55969
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 5:34:45 PM	55969
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2020 5:34:45 PM	55969
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	10/23/2020 5:34:45 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH08 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 10:10:00 AM

Lab ID: 2010957-015

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 3:37:04 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/23/2020 4:28:10 PM	55973
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/23/2020 4:28:10 PM	55973
Surr: DNOP	90.7	30.4-154		%Rec	1	10/23/2020 4:28:10 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 5:58:08 PM	55969
Surr: BFB	96.7	75.3-105		%Rec	1	10/23/2020 5:58:08 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 5:58:08 PM	55969
Toluene	ND	0.047		mg/Kg	1	10/23/2020 5:58:08 PM	55969
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 5:58:08 PM	55969
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2020 5:58:08 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 5:58:08 PM	55969

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

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



## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH08 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/20/2020 10:20:00 AM

Lab ID: 2010957-016

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	290	60		mg/Kg	20	10/27/2020 3:49:28 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/23/2020 4:37:54 PM	55973
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/23/2020 4:37:54 PM	55973
Surr: DNOP	87.8	30.4-154		%Rec	1	10/23/2020 4:37:54 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 6:21:32 PM	55969
Surr: BFB	97.4	75.3-105		%Rec	1	10/23/2020 6:21:32 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 6:21:32 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 6:21:32 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 6:21:32 PM	55969
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 6:21:32 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 6:21:32 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH09 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 10:50:00 AM

Lab ID: 2010957-017

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	59		mg/Kg	20	10/27/2020 4:26:42 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/23/2020 4:47:39 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 4:47:39 PM	55973
Surr: DNOP	93.2	30.4-154		%Rec	1	10/23/2020 4:47:39 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/23/2020 6:44:54 PM	55969
Surr: BFB	97.0	75.3-105		%Rec	1	10/23/2020 6:44:54 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 6:44:54 PM	55969
Toluene	ND	0.050		mg/Kg	1	10/23/2020 6:44:54 PM	55969
Ethylbenzene	ND	0.050		mg/Kg	1	10/23/2020 6:44:54 PM	55969
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 6:44:54 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 6:44:54 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH09 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/20/2020 11:00:00 AM

Lab ID: 2010957-018

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	10/27/2020 4:39:06 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/23/2020 4:57:22 PM	55973
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/23/2020 4:57:22 PM	55973
Surr: DNOP	87.9	30.4-154		%Rec	1	10/23/2020 4:57:22 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 7:08:17 PM	55969
Surr: BFB	96.4	75.3-105		%Rec	1	10/23/2020 7:08:17 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.025		mg/Kg	1	10/23/2020 7:08:17 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 7:08:17 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 7:08:17 PM	55969
Xylenes, Total	ND	0.099		mg/Kg	1	10/23/2020 7:08:17 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 7:08:17 PM	55969

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH10 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 11:30:00 AM

Lab ID: 2010957-019

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	410	60		mg/Kg	20	10/27/2020 4:51:30 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/23/2020 5:07:03 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 5:07:03 PM	55973
Surr: DNOP	87.0	30.4-154		%Rec	1	10/23/2020 5:07:03 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 7:31:41 PM	55969
Surr: BFB	95.0	75.3-105		%Rec	1	10/23/2020 7:31:41 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	10/23/2020 7:31:41 PM	55969
Toluene	ND	0.047		mg/Kg	1	10/23/2020 7:31:41 PM	55969
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 7:31:41 PM	55969
Xylenes, Total	ND	0.093		mg/Kg	1	10/23/2020 7:31:41 PM	55969
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	10/23/2020 7:31:41 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH10 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/20/2020 11:45:00 AM

Lab ID: 2010957-020

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	84	60		mg/Kg	20	10/27/2020 5:03:55 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/23/2020 5:16:46 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 5:16:46 PM	55973
Surr: DNOP	85.4	30.4-154		%Rec	1	10/23/2020 5:16:46 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/23/2020 8:41:50 PM	55969
Surr: BFB	95.3	75.3-105		%Rec	1	10/23/2020 8:41:50 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 8:41:50 PM	55969
Toluene	ND	0.047		mg/Kg	1	10/23/2020 8:41:50 PM	55969
Ethylbenzene	ND	0.047		mg/Kg	1	10/23/2020 8:41:50 PM	55969
Xylenes, Total	ND	0.094		mg/Kg	1	10/23/2020 8:41:50 PM	55969
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/23/2020 8:41:50 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH11 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 12:00:00 PM

Lab ID: 2010957-021

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	440	59		mg/Kg	20	10/27/2020 5:16:20 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	1000	93		mg/Kg	10	10/23/2020 5:26:33 PM	55973
Motor Oil Range Organics (MRO)	970	460		mg/Kg	10	10/23/2020 5:26:33 PM	55973
Surr: DNOP	0	30.4-154	S	%Rec	10	10/23/2020 5:26:33 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/23/2020 9:05:23 PM	55969
Surr: BFB	101	75.3-105		%Rec	1	10/23/2020 9:05:23 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.024		mg/Kg	1	10/23/2020 9:05:23 PM	55969
Toluene	ND	0.048		mg/Kg	1	10/23/2020 9:05:23 PM	55969
Ethylbenzene	ND	0.048		mg/Kg	1	10/23/2020 9:05:23 PM	55969
Xylenes, Total	ND	0.096		mg/Kg	1	10/23/2020 9:05:23 PM	55969
Surr: 4-Bromofluorobenzene	99.1	80-120		%Rec	1	10/23/2020 9:05:23 PM	55969

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH11 @ 12.5-15'

Project: Chaco 2308

Collection Date: 10/20/2020 12:15:00 PM

Lab ID: 2010957-022

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	500	60		mg/Kg	20	10/27/2020 5:28:45 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/23/2020 5:36:22 PM	55973
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/23/2020 5:36:22 PM	55973
Surr: DNOP	78.7	30.4-154		%Rec	1	10/23/2020 5:36:22 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 9:28:57 PM	55969
Surr: BFB	92.9	75.3-105		%Rec	1	10/23/2020 9:28:57 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/23/2020 9:28:57 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 9:28:57 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 9:28:57 PM	55969
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 9:28:57 PM	55969
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	10/23/2020 9:28:57 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH12 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 1:00:00 PM

Lab ID: 2010957-023

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	280	59		mg/Kg	20	10/27/2020 5:41:09 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	10/23/2020 5:46:13 PM	55973
Motor Oil Range Organics (MRO)	200	49		mg/Kg	1	10/23/2020 5:46:13 PM	55973
Surr: DNOP	124	30.4-154		%Rec	1	10/23/2020 5:46:13 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	ND	9.6		mg/Kg	2	10/23/2020 9:52:28 PM	55969
Surr: BFB	103	75.3-105		%Rec	2	10/23/2020 9:52:28 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	ND	0.048		mg/Kg	2	10/23/2020 9:52:28 PM	55969
Toluene	ND	0.096		mg/Kg	2	10/23/2020 9:52:28 PM	55969
Ethylbenzene	ND	0.096		mg/Kg	2	10/23/2020 9:52:28 PM	55969
Xylenes, Total	ND	0.19		mg/Kg	2	10/23/2020 9:52:28 PM	55969
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	2	10/23/2020 9:52:28 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH12 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/20/2020 1:10:00 PM

Lab ID: 2010957-024

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	2400	60		mg/Kg	20	10/27/2020 5:53:33 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	28	9.4		mg/Kg	1	10/23/2020 6:05:56 PM	55973
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/23/2020 6:05:56 PM	55973
Surr: DNOP	98.1	30.4-154		%Rec	1	10/23/2020 6:05:56 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>RAA</b>
Gasoline Range Organics (GRO)	11	9.7		mg/Kg	2	10/24/2020 8:24:10 PM	55969
Surr: BFB	114	75.3-105	S	%Rec	2	10/24/2020 8:24:10 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>RAA</b>
Benzene	0.053	0.048		mg/Kg	2	10/24/2020 8:24:10 PM	55969
Toluene	ND	0.097		mg/Kg	2	10/24/2020 8:24:10 PM	55969
Ethylbenzene	ND	0.097		mg/Kg	2	10/24/2020 8:24:10 PM	55969
Xylenes, Total	0.28	0.19		mg/Kg	2	10/24/2020 8:24:10 PM	55969
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	2	10/24/2020 8:24:10 PM	55969

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH12 @ 7.5-9'

Project: Chaco 2308

Collection Date: 10/20/2020 1:20:00 PM

Lab ID: 2010957-025

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	790	59		mg/Kg	20	10/27/2020 6:05:58 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	18	10		mg/Kg	1	10/23/2020 6:15:48 PM	55973
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/23/2020 6:15:48 PM	55973
Surr: DNOP	111	30.4-154		%Rec	1	10/23/2020 6:15:48 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/23/2020 10:39:13 PM	55969
Surr: BFB	103	75.3-105		%Rec	1	10/23/2020 10:39:13 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/23/2020 10:39:13 PM	55969
Toluene	ND	0.048		mg/Kg	1	10/23/2020 10:39:13 PM	55969
Ethylbenzene	ND	0.048		mg/Kg	1	10/23/2020 10:39:13 PM	55969
Xylenes, Total	ND	0.097		mg/Kg	1	10/23/2020 10:39:13 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 10:39:13 PM	55969

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.
	D	Sample Diluted Due to Matrix
	H	Holding times for preparation or analysis exceeded
	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit
	S	% Recovery outside of range due to dilution or matrix

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH13 @ 0-2.5'

Project: Chaco 2308

Collection Date: 10/20/2020 1:40:00 PM

Lab ID: 2010957-026

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	10/27/2020 6:18:22 PM	56055
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/23/2020 6:25:40 PM	55973
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/23/2020 6:25:40 PM	55973
Surr: DNOP	92.4	30.4-154		%Rec	1	10/23/2020 6:25:40 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 11:02:49 PM	55969
Surr: BFB	94.6	75.3-105		%Rec	1	10/23/2020 11:02:49 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/23/2020 11:02:49 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 11:02:49 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 11:02:49 PM	55969
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 11:02:49 PM	55969
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	10/23/2020 11:02:49 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH13 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/20/2020 2:00:00 PM

Lab ID: 2010957-027

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	89	61		mg/Kg	20	10/26/2020 2:18:19 PM	56038
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/23/2020 6:35:32 PM	55973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/23/2020 6:35:32 PM	55973
Surr: DNOP	91.4	30.4-154		%Rec	1	10/23/2020 6:35:32 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 11:26:20 PM	55969
Surr: BFB	94.0	75.3-105		%Rec	1	10/23/2020 11:26:20 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/23/2020 11:26:20 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 11:26:20 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 11:26:20 PM	55969
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 11:26:20 PM	55969
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/23/2020 11:26:20 PM	55969

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

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

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## Analytical Report

Lab Order 2010957

Date Reported: 10/28/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: BH14 @ 2.5-5'

Project: Chaco 2308

Collection Date: 10/20/2020 2:30:00 PM

Lab ID: 2010957-028

Matrix: SOIL

Received Date: 10/21/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	ND	60		mg/Kg	20	10/26/2020 2:30:44 PM	56038
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/23/2020 6:45:22 PM	55973
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/23/2020 6:45:22 PM	55973
Surr: DNOP	69.7	30.4-154		%Rec	1	10/23/2020 6:45:22 PM	55973
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/23/2020 11:49:58 PM	55969
Surr: BFB	95.9	75.3-105		%Rec	1	10/23/2020 11:49:58 PM	55969
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/23/2020 11:49:58 PM	55969
Toluene	ND	0.049		mg/Kg	1	10/23/2020 11:49:58 PM	55969
Ethylbenzene	ND	0.049		mg/Kg	1	10/23/2020 11:49:58 PM	55969
Xylenes, Total	ND	0.098		mg/Kg	1	10/23/2020 11:49:58 PM	55969
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/23/2020 11:49:58 PM	55969

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

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

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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>MB-56009</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56009</b>	RunNo: <b>72886</b>								
Prep Date: <b>10/23/2020</b>	Analysis Date: <b>10/23/2020</b>	SeqNo: <b>2563358</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-56009</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56009</b>	RunNo: <b>72886</b>								
Prep Date: <b>10/23/2020</b>	Analysis Date: <b>10/23/2020</b>	SeqNo: <b>2563359</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: <b>MB-56038</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56038</b>	RunNo: <b>72931</b>								
Prep Date: <b>10/26/2020</b>	Analysis Date: <b>10/26/2020</b>	SeqNo: <b>2564017</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-56038</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56038</b>	RunNo: <b>72931</b>								
Prep Date: <b>10/26/2020</b>	Analysis Date: <b>10/26/2020</b>	SeqNo: <b>2564018</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	90	110			

Sample ID: <b>MB-56055</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>56055</b>	RunNo: <b>72930</b>								
Prep Date: <b>10/27/2020</b>	Analysis Date: <b>10/27/2020</b>	SeqNo: <b>2565213</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-56055</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>56055</b>	RunNo: <b>72930</b>								
Prep Date: <b>10/27/2020</b>	Analysis Date: <b>10/27/2020</b>	SeqNo: <b>2565214</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.7	90	110			

**Qualifiers:**

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

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>2010957-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH01 @ 0-2.5'</b>	Batch ID: <b>55965</b>	RunNo: <b>72844</b>								
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>	SeqNo: <b>2560333</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	8.7	43.63	0	97.4	15	184			
Surr: DNOP	4.3		4.363		99.0	30.4	154			

Sample ID: <b>LCS-55965</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55965</b>	RunNo: <b>72844</b>								
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>	SeqNo: <b>2560334</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	127	70	130			
Surr: DNOP	6.1		5.000		122	30.4	154			

Sample ID: <b>MB-55965</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55965</b>	RunNo: <b>72844</b>								
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>	SeqNo: <b>2560335</b>	Units: <b>mg/Kg</b>							
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	12		10.00		123	30.4	154			

Sample ID: <b>2010957-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>BH01 @ 0-2.5'</b>	Batch ID: <b>55965</b>	RunNo: <b>72844</b>								
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>	SeqNo: <b>2560542</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	8.5	42.34	0	98.8	15	184	1.57	23.9	
Surr: DNOP	4.2		4.234		99.1	30.4	154	0	0	

Sample ID: <b>LCS-55972</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>55972</b>	RunNo: <b>72876</b>								
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>	SeqNo: <b>2561698</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.1	30.4	154			

Sample ID: <b>MB-55972</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>55972</b>	RunNo: <b>72876</b>								
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>	SeqNo: <b>2561699</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>MB-55972</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>55972</b>		RunNo: <b>72876</b>							
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2561699</b>		Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		91.5	30.4	154			

Sample ID: <b>2010957-010AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH05 @ 12.5-15'</b>	Batch ID: <b>55973</b>		RunNo: <b>72876</b>							
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562796</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.3	46.73	0	84.3	15	184			
Surr: DNOP	4.6		4.673		97.8	30.4	154			

Sample ID: <b>2010957-010AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>BH05 @ 12.5-15'</b>	Batch ID: <b>55973</b>		RunNo: <b>72876</b>							
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562797</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.3	46.25	0	78.7	15	184	7.81	23.9	
Surr: DNOP	4.0		4.625		87.5	30.4	154	0	0	

Sample ID: <b>LCS-55973</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>55973</b>		RunNo: <b>72876</b>							
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562830</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.2	70	130			
Surr: DNOP	4.8		5.000		95.8	30.4	154			

Sample ID: <b>MB-55973</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>55973</b>		RunNo: <b>72876</b>							
Prep Date: <b>10/22/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562832</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	30.4	154			

**Qualifiers:**

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

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: 2010957-011ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH06 @ 2.5-5'	Batch ID: 55969	RunNo: 72897								
Prep Date: 10/21/2020	Analysis Date: 10/23/2020	SeqNo: 2562358 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.70	0	94.1	61.3	114			
Surr: BFB	1000		988.1		104	75.3	105			

Sample ID: 2010957-011amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH06 @ 2.5-5'	Batch ID: 55969	RunNo: 72897								
Prep Date: 10/21/2020	Analysis Date: 10/23/2020	SeqNo: 2562359 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.75	0	91.4	61.3	114	2.65	20	
Surr: BFB	1100		990.1		107	75.3	105	0	0	S

Sample ID: lcs-55969	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 55969	RunNo: 72897								
Prep Date: 10/21/2020	Analysis Date: 10/23/2020	SeqNo: 2562394 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.8	72.5	106			
Surr: BFB	1100		1000		108	75.3	105			S

Sample ID: mb-55969	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 55969	RunNo: 72897								
Prep Date: 10/21/2020	Analysis Date: 10/23/2020	SeqNo: 2562396 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.1	75.3	105			

**Qualifiers:**

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H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>2010957-010ams</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH05 @ 12.5-15'</b>	Batch ID: <b>55969</b>		RunNo: <b>72897</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562404</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9690	0	95.4	76.3	120			
Toluene	0.98	0.048	0.9690	0	101	78.5	120			
Ethylbenzene	1.0	0.048	0.9690	0	104	78.1	124			
Xylenes, Total	3.0	0.097	2.907	0	104	79.3	125			
Surr: 4-Bromofluorobenzene	0.99		0.9690		102	80	120			

Sample ID: <b>2010957-010amsd</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>BH05 @ 12.5-15'</b>	Batch ID: <b>55969</b>		RunNo: <b>72897</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562405</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9497	0	95.0	76.3	120	2.42	20	
Toluene	0.96	0.047	0.9497	0	101	78.5	120	2.36	20	
Ethylbenzene	0.99	0.047	0.9497	0	104	78.1	124	1.77	20	
Xylenes, Total	3.0	0.095	2.849	0	105	79.3	125	1.73	20	
Surr: 4-Bromofluorobenzene	0.97		0.9497		102	80	120	0	0	

Sample ID: <b>LCS-55969</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>55969</b>		RunNo: <b>72897</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562443</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.0	80	120			
Toluene	0.95	0.050	1.000	0	95.1	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID: <b>mb-55969</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>55969</b>		RunNo: <b>72897</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2562445</b>		Units: <b>mg/Kg</b>					
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	80	120			

**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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>mb-55960</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>PBS</b>		Batch ID: <b>55960</b>		RunNo: <b>72871</b>						
Prep Date: <b>10/21/2020</b>		Analysis Date: <b>10/22/2020</b>		SeqNo: <b>2561413</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		96.4	70	130			
Surr: 4-Bromofluorobenzene	0.57		0.5000		115	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.3	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

Sample ID: <b>lcs-55960</b>		SampType: <b>LCS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>BatchQC</b>		Batch ID: <b>55960</b>		RunNo: <b>72871</b>						
Prep Date: <b>10/21/2020</b>		Analysis Date: <b>10/22/2020</b>		SeqNo: <b>2561414</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	1.000	0	80.3	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.1	0.050	1.000	0	108	80	120			
Xylenes, Total	3.1	0.10	3.000	0	105	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.3	70	130			
Surr: 4-Bromofluorobenzene	0.55		0.5000		111	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.3	70	130			
Surr: Toluene-d8	0.53		0.5000		106	70	130			

Sample ID: <b>2010957-001ams</b>		SampType: <b>MS4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>BH01 @ 0-2.5'</b>		Batch ID: <b>55960</b>		RunNo: <b>72871</b>						
Prep Date: <b>10/21/2020</b>		Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2561416</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.024	0.9756	0	98.7	71.1	115			
Toluene	1.1	0.049	0.9756	0	112	79.6	132			
Ethylbenzene	1.1	0.049	0.9756	0	113	83.8	134			
Xylenes, Total	3.3	0.098	2.927	0	112	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.50		0.4878		103	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.4878		109	70	130			
Surr: Dibromofluoromethane	0.53		0.4878		109	70	130			
Surr: Toluene-d8	0.51		0.4878		104	70	130			

**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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>2010957-001amsd</b>		SampType: <b>MSD4</b>		TestCode: <b>EPA Method 8260B: Volatiles Short List</b>						
Client ID: <b>BH01 @ 0-2.5'</b>		Batch ID: <b>55960</b>		RunNo: <b>72871</b>						
Prep Date: <b>10/21/2020</b>		Analysis Date: <b>10/23/2020</b>		SeqNo: <b>2561417</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9804	0	103	71.1	115	4.74	20	
Toluene	1.1	0.049	0.9804	0	114	79.6	132	2.54	20	
Ethylbenzene	1.2	0.049	0.9804	0	118	83.8	134	4.85	20	
Xylenes, Total	3.4	0.098	2.941	0	116	82.4	132	4.01	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4902		104	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.54		0.4902		111	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4902		112	70	130	0	0	
Surr: Toluene-d8	0.51		0.4902		104	70	130	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 Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

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



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

WO#: 2010957

28-Oct-20

**Client:** LTE  
**Project:** Chaco 2308

Sample ID: <b>mb-55960</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>55960</b>		RunNo: <b>72871</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>		SeqNo: <b>2561431</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	470		500.0		94.8	70	130			

Sample ID: <b>lcs-55960</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>55960</b>		RunNo: <b>72871</b>							
Prep Date: <b>10/21/2020</b>	Analysis Date: <b>10/22/2020</b>		SeqNo: <b>2561432</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	94.0	70	130			
Surr: BFB	480		500.0		96.7	70	130			

**Qualifiers:**

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

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





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

## Sample Log-In Check List

Client Name: **LTE**Work Order Number: **2010957**RcptNo: **1**Received By: **Cheyenne Cason** 10/21/2020 8:10:00 AMCompleted By: **Erin Melendrez** 10/21/2020 9:13:49 AMReviewed By: **S.P.A. 10/21/20**

### Chain of Custody

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

### Log In

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

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: **JR 10/21/20**

### Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_

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

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				







Released to Imaging: 3/28/2022 11:13:12 AM

LTE

848 E 2nd Ave

Durango Co. 81301

Phone #: 970-385-1096

- ☐ Level 4 (Full Validation)

☐ NELAC      ☐ Other☐ EDD (Type)

Date	Time	Matrix	Sample Name
------	------	--------	-------------

10120	946	5011	BH07@ 2.5-5'
1000		BH07@ 12.5-15'	
1016		BH08@ 0-2.5'	
1070		BH08@ 12.5-15'	
1050		BH09@ 0-2.5'	
1000		BH09@ 12.5-15'	
1136		BH10@ 0-2.5'	
1145		BH10@ 12.5-15'	
1200		BH11@ 0-2.5'	
1215		BH11@ 12.5-15'	
1300		BH12@ 0-2.5'	
1315		BH12@ 2.5-5'	

Date:	Time:	Relinquished by:
-------	-------	------------------

10/20	1457	Eric Carroll
-------	------	--------------

Date:	Time:	Relinquished by:
-------	-------	------------------

20/7/20 1803 Anthony Dutton

☒ Standard      ☐ Rush

Project Name:

Chaco 2304

Project #: 077920007

Project Manager:

Stuart Hyde

Sampler: E. Carroll

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF):  $3.9 + 0 = 3.9$  ( $^{\circ}\text{C}$ )Container  
Type and #Preservative  
Type

HEAL No.

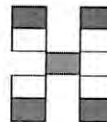
1402	cool	-013
		-014
		-015
		-016
		-017
		-018
		-019
		-020
		-021
		-022
		-023
		-024

Received by:	Via:	Date	Time
--------------	------	------	------

Get Work

Received by: \_\_\_\_\_ Via: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

CH- Camr 10/12/20 0810



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

[illegible]

Remarks:	
----------	--

Seal intact on cooler  
as before







ENCLOSURE G – CHACO 2308 03L #404H OFF-PAD RECLAMATION



## CHACO 2308 03L #404H OFF-PAD RECLAMATION

March 2021

Approximately 0.35 acres of land east and south of the Chaco 2308 03L well pad were disturbed during remediation of oil and produced water released in August 2020. Whiptail Midstream will reclaim disturbed areas in accordance with Vegetation Reclamation Procedure A of the Bureau of Land Management (BLM) Farmington Field Office (FFO) *Bare Soil Reclamation Procedures* (2013) and *Onshore Oil and Gas Order No. 1*. Vegetation Reclamation Procedure A applies to bare mineral soil in areas of less than 1.0 acre, but more than 0.1 acre. Whiptail is not required to monitor the revegetation of bare soil sites that are less than 1.0 acre in area.

### EXISTING CONDITIONS

**Vegetation:** Sagebrush Community — Common species include: Wyoming big sagebrush; basin big sagebrush; black sagebrush; Utah Juniper; pinon pine; four-wing saltbush; antelope bitterbrush; alkali sacaton; Western wheatgrass; Indian ricegrass; galleta; sand dropseed

**Soils:** Clayey to fine sandy loam

### RECLAMATION METHODS

- Disturbed areas will be recontoured to blend with the surrounding landscape and recreate pre-disturbance conditions, to the extent practicable.
- Approximately 280 cubic yards of topsoil will be obtained from Envirotech in Farmington and transported to the site via truck.
- Topsoil will be spread across the reclaimed area to the south of the well pad to a depth of approximately 6 inches and prepared for seeding by the construction contractor. Ripping, disking, and seeding will be completed within 90 days of project completion using the below seed mix.
- Mulching will consist of crimping certified weed-free straw into the soil.
- Erosion control Best Management Practices (BMPs; e.g., erosion control blankets, straw bales, or straw wattles) will be installed to limit erosion and sediment transport from reclaimed areas, as needed.

### PROPOSED SEED MIX

Common Name	Scientific Name	Variety	Pounds Live Seed / Acre
Antelope bitterbrush	<i>Purshia tridentata</i>	VNS	2.0
Winterfat	<i>Krascheninnikovia lanata</i>	VNS	2.0
Blue grama	<i>Bouteloua gracilis</i>	Alma or Hachita	2.0
Galleta	<i>Pleurophis jamesii</i>	Viva florets	3.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	VNS	0.5
Bottlebrush squirreltail	<i>Elymus elymoides</i>	Tusas or VNS	3.0
Small burnet	<i>Sanguisorba minor</i>	Delar	0.25
Rocky Mountain bee plant	<i>Cleome serrulata</i>	VNS	0.25





## WEED CONTROL

Should noxious or invasive weeds be documented after earthwork and seeding activities, Whiptail will coordinate with the BLM-FFO to determine specific requirements and instructions for weed treatments, including the period of treatment, approved herbicides that may be used, and required documentation to be submitted to the BLM/FFO after treatment.

## SUCCESS STANDARDS

Reclamation will be deemed successful when the total percent (%) foliar cover of desirable trees, shrubs, forbs, and grasses reaches 35%, or approximately 70% of the surrounding foliar cover. Invasive/undesirables may make up 10% of the 35% foliar cover.



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

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

CONDITIONS  
  
Action 23852

CONDITIONS

Operator:  Whiptail Midstream LLC 15 West 6th Street Tulsa, OK 74119	OGRID:  373240
	Action Number:  23852
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/28/2022