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	
District RP	
Facility ID	
Application ID	

Release Notification

RCVD 6/13/19

Responsible Party

Responsible Party: **Enduring Resources**	OGRID: **372286**
Contact Name: **James McDaniel**	Contact Telephone: **505-636-9731**
Contact email: **jmcdaniel@enduringresources.com**	Incident # *(assigned by OCD)* **NCS 1906550300**
Contact mailing address: **200 Energy Court**	**Farmington, New Mexico 87401**

Location of Release Source

Latitude **36.362343** Longitude **-108.051209**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: **E.L. 1**	Site Type: **Wellsite**
Date Release Discovered: **2/21/2019**	API# *(if applicable)* **30-045-28906**

Unit Letter	Section	Township	Range	County
D	**31**	**25N**	**11W**	**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)

☒ Crude Oil	Volume Released (bbls) **17**	Volume Recovered (bbls) **15**
☐ Produced Water	Volume Released (bbls):	Volume Recovered (bbls):
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Please see attached remediation report completed by LT Environmental for a description of all remediation activities. Enduring is requesting closure of this incident based on the remediation performed.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	10 (ft bgs)
Did this release impact groundwater or surface water?	☒ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☒ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

☒ Description of remediation activities

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

Printed Name: **James McDaniel** Title: **HSE Supervisor**

Signature: Date: **6/12/2019**

email: **jmcdaniel@enduringresources.com** Telephone: **505-636-9731**

OCD Only

Received by: OCD Date: 6/13/19

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: 7/10/19

Printed Name: Cory Title: Environmental Spec

James McDaniel

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Tuesday, May 21, 2019 7:20 AM
To: Devin Hencmann
Cc: James McDaniel; Ashley Ager
Subject: RE: [EXT] Extension Request EL#1 NCS1906550300

Devin,

OCD grants Enduring request for an extension to June 12, 2019.

Please include this approval in the final Closure report.

OCD approval does not relieve Enduring of any 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

From: Devin Hencmann <dhencmann@ltenv.com>
Sent: Monday, May 20, 2019 12:46 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: James McDaniel <JMcDaniel@enduringresources.com>; Ashley Ager <aager@ltenv.com>
Subject: [EXT] Extension Request EL#1 NCS1906550300

Cory,

Enduring is requesting an extension to the 90-day deadline of May 22, 2019 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the EL #1 (incident # NCS1906550300) . The release was reported on March 1, 2019. Enduring initiated site characterization and removal of impacted soil on March 1, 2019. During excavation activities, water was encountered at approximately 12 feet below ground surface (bgs). Groundwater was not anticipated at such a shallow depth. In response, Enduring began pumping water and observing recharge to establish if the water in the excavation was ground water or temporary storage of surface water from recent wet spring weather. While removing the water, additional background sampling was conducted to evaluate the occurrence and quality of surface and potential groundwater off site. Once the background data and pumping/recharge observations had been evaluated, Enduring decided to collect confirmation samples of the excavation in the presence of the NMOCD. Rush turnaround has been requested for the confirmation samples. If the samples collected from the sidewalls exceed NMOCD closure standards, additional excavation will be initiated. If sample results are below standards, a closure report will be submitted. However, Enduring does not feel that there is enough time remaining in their original deadline to complete either additional excavation or submittal of a closure report. Enduring requests an extension of this deadline until June 12, 2019.

Thank you,
Devin

Enduring Resources, LLC
Spill Closure Report
E.L. 1

Photo 1: Site after Final Excavation Sampling

Enduring Resources, LLC
Spill Closure Report
E.L. 1

Photo 2: Site after Final Excavation Sampling (View 2)


195 Feet
EL 1

U.S. Fish and Wildlife Service

National Wetlands Inventory

E.L. 1

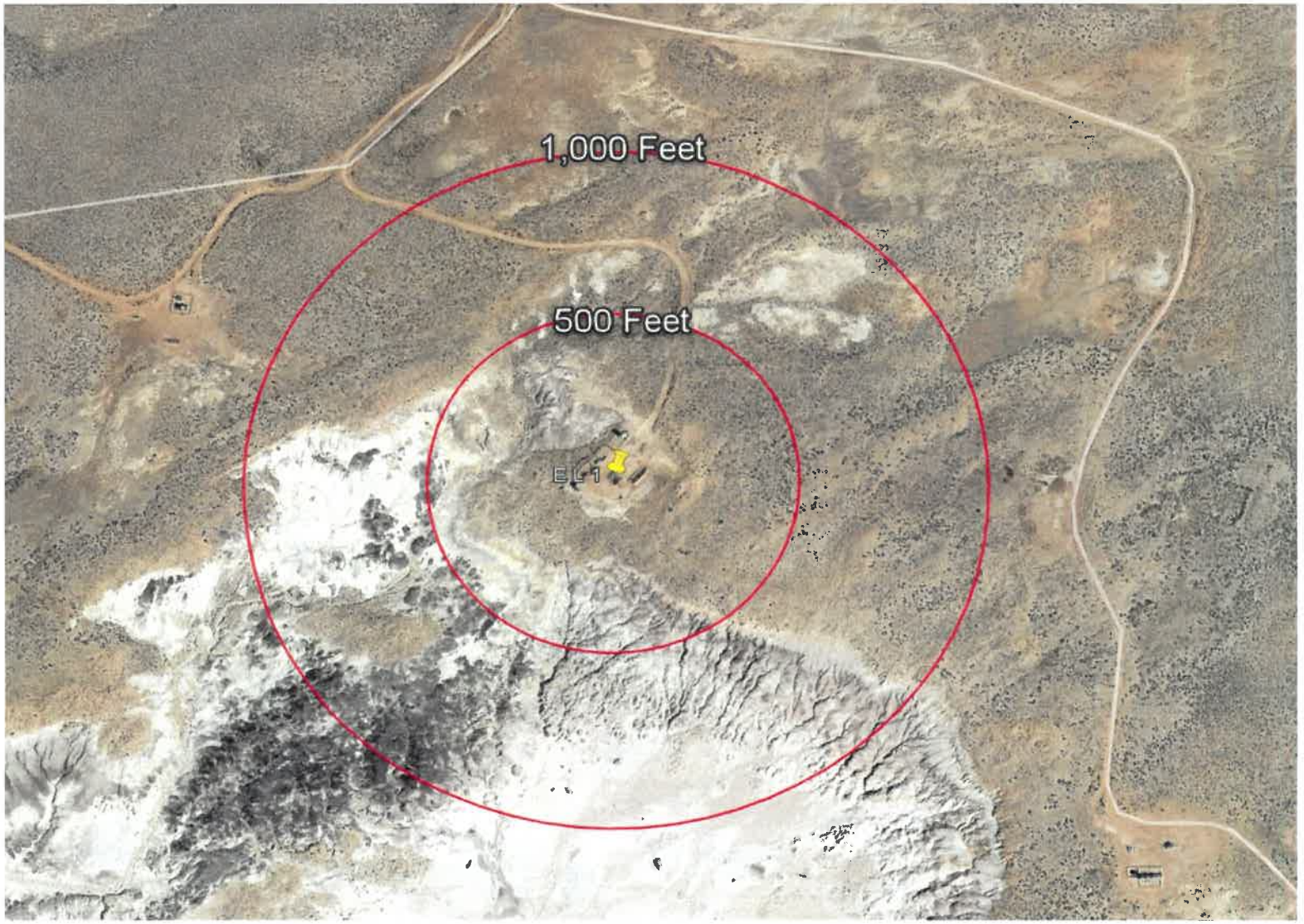
June 12, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

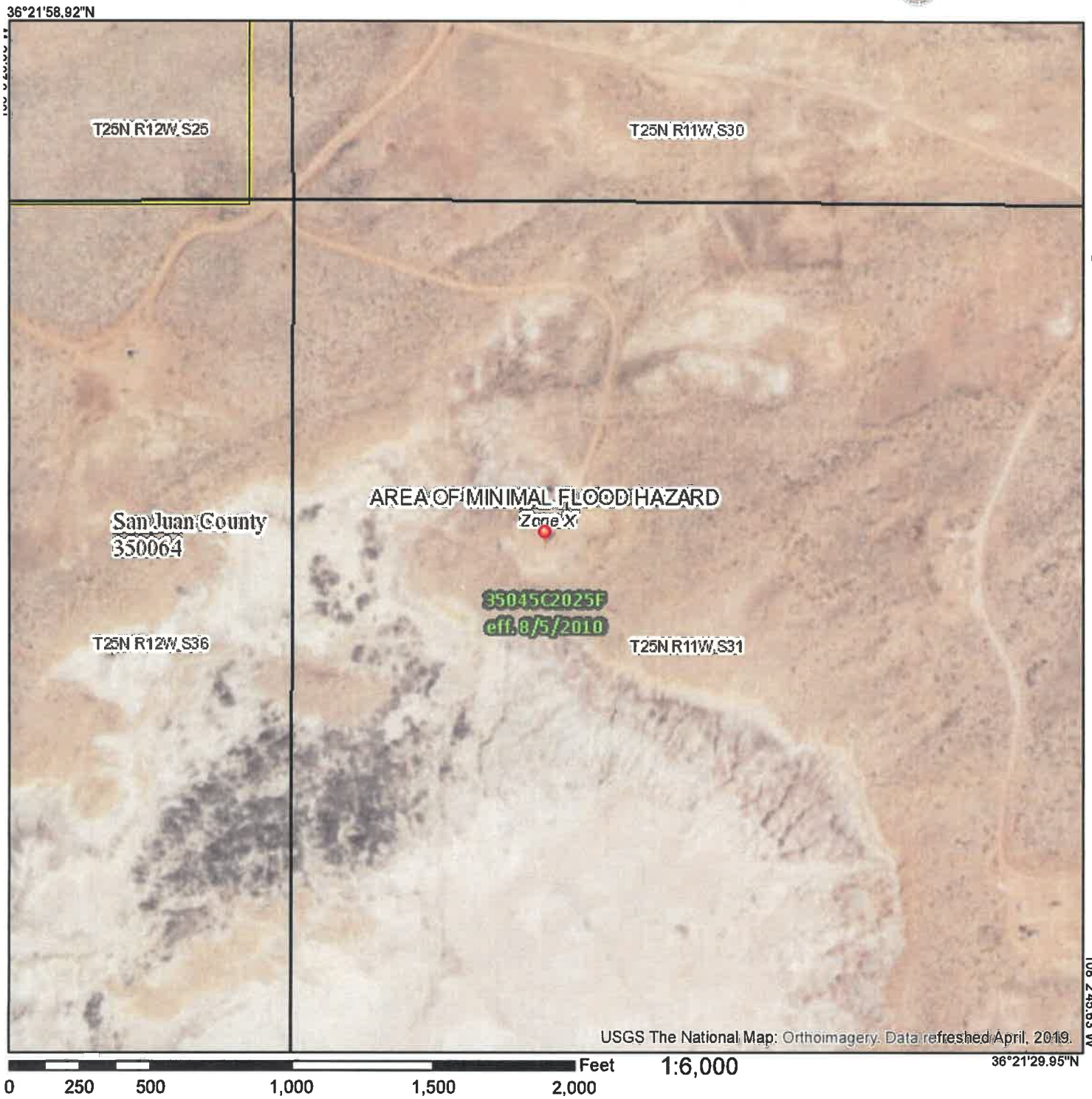
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper


1,000 Feet
500 Feet
EL 1

National Flood Hazard Layer FIRMette

FEMA



Legend

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

- **SPECIAL FLOOD HAZARD AREAS**
  - Without Base Flood Elevation (BFE) *Zone A, V, A99*
  - With BFE or Depth *Zone AE, AO, AH, VE, AR*
  - Regulatory Floodway
- **OTHER AREAS OF FLOOD HAZARD**
  - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainag areas of less than one square mile *Zone*
  - Future Conditions 1% Annual Chance Flood Hazard *Zone X*
  - Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
  - Area with Flood Risk due to Levee *Zone D*
- **OTHER AREAS**
  - NO SCREEN — Area of Minimal Flood Hazard *Zone X*
  - Effective LOMRs
  - Area of Undetermined Flood Hazard *Zone*
- **GENERAL STRUCTURES**
  - Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- **OTHER FEATURES**
  - 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
  - Coastal Transect
  - 513 — Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- **MAP PANELS**
  - Digital Data Available
  - No Digital Data Available
  - Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/12/2019 at 10:30:18 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

No records found.

PLSS Search:

Section(s): 31 Township: 25N Range: 11W

LT Environmental, Inc.
848 East Second Avenue
Durango, Colorado 81301
970 385 1096

June 12, 2019

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

RE: Closure Request
E.L. #1
Enduring Resources
Incident Number NCS 1906550300
San Juan County, New Mexico

Dear Mr. Smith:

LT Environmental, Inc. (LTE) on behalf of Enduring Resources, LLC (Enduring), presents the following report detailing remediation of impacted soil at the E.L. #1 wellsite (Site) located in Unit D, Section 31, Township 25 North, Range 11 West, in San Juan County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after a release of crude oil within secondary containment.

On February 21, 2019, an oil dump on the separator stuck causing oil to flow into the produced water tank, which ultimately overflowed approximately 17 barrels (bbls) into the bermed secondary containment. Approximately 15 bbls of oil were recovered by vacuum truck, and an additional 2 bbls were recovered using a hydro-vacuum truck. Enduring reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on March 1, 2019 and was assigned incident number NCS 1906550300. Based on excavation of impacted soil and subsequent confirmation sampling results, Enduring is requesting no further action for this release.

BACKGROUND

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 200 feet below ground surface (bgs), based on the nearest water well data. The nearest permitted water well with depth to water data has a depth to groundwater of 210 feet and a total depth of 403 feet, located 4.6 miles north of the Site. Groundwater was observed in the excavation however this water is assumed to be seasonal and representative of surface water infiltrating into the subsurface. Based on the presence of groundwater in the excavation depth to groundwater is considered to be less than 50 feet feet bgs. The nearest significant watercourse is an unnamed second-order tributary to Willow Wash located approximately 200 feet to the northwest. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlaying a subsurface mine. 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.

EXCAVATION ACTIVITIES

Enduring removed the produced water tank and excavated approximately 312 cubic yards of petroleum hydrocarbon impacted soil. The final excavation was approximately 60 feet by 20 feet with a depth ranging from 8 feet bgs in the northeast to 10 feet bgs in the southwest. The excavation extent is presented in Figure 2. During excavation activities, Enduring observed water infilling the deepest portion of the excavation. Water from the excavation was removed multiple times with a vacuum truck and recharge was observed.

SAMPLING

Background soil and groundwater samples were collected from what is estimated to be upgradient northeast of the excavation off Site to investigate water quality and naturally occurring chloride concentrations. The groundwater sample was collected with the use of a Hydropunch groundwater sampler on April 1, 2019, groundwater was encountered at approximately 12 feet bgs. A soil sample was collected on April 15, 2019 with a hand auger from 12 feet bgs just above where groundwater was encountered. Background soil and groundwater samples were analyzed for chloride by Environmental Protection Agency (EPA) Method 300.0. Background sample locations are illustrated on Figure 2.

Closure sampling of the excavation occurred on May 16, 2019 and May 31, 2019. Seven soil samples and one water sample were collected under observation of the NMOCD on May 16, 2019, sample EX-4 sampled on May 16, 2019 exceeded NMOCD standards requiring additional excavation in that area. Four additional samples were collected on May 31, 2019 to confirm impacted soil near sample EX-4 was removed. Soil samples were collected as a 5-point composite sample from each of the sidewalls and two composite samples from the excavation floor.

LTE sampled water that pooled in excavation by collecting a grab sample in a decontaminated pitcher or bailer and immediately filling one 250 milliliter (ml) pre-cleaned unpreserved plastic bottle and three pre-cleaned and pre-preserved 40 ml glass vials with zero headspace to prevent degradation of the sample. The water in the excavation was pumped 24 hours prior to water samples being collected to obtain a sample representative of subsurface conditions. Water sampled from the excavation was analyzed for volatile organic compounds (VOC's) by EPA Method 8260B, and chloride by EPA Method 300.0.

Excavation soil samples were analyzed for BTEX by United States Environmental Protection Agency (EPA) Method 8021, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by EPA Method 8015, and chloride by EPA Method 300.0. All samples collected were placed on ice to maintain a temperature of approximately 4 degrees Celsius (°C) and sealed in a cooler for delivery to Hall Environmental Analysis Laboratory (Hall), of Albuquerque, New Mexico, for analysis. Soil samples were labeled with the date and time of collection, sample name, sampler's name, and parameters to be analyzed. Strict chain-of-custody procedures were documented including the date

and time sampled, sample number, type of sample, sampler's name and signature, preservative used, and analyses required.

RESULTS

The upgradient background groundwater sample contained a chloride concentration of 790 milligrams per liter (mg/L). The background soil sample collected from 12 feet bgs contained a chloride concentration of 510 mg/kg. Background sample results are listed in Table 1 and Table 2, and depicted in Figure 2.

Laboratory analytical results indicate BTEX, TPH, and chloride concentrations in soil on the sidewalls and the floor of the excavation did not exceed NMOCD standards. Laboratory analytical results are listed on Table 1 and depicted in Figure 2. The complete laboratory reports are included in Attachment A.

Laboratory analytical results for the water sampled in the excavation indicated no concentration of VOC's above laboratory reporting limits. Laboratory analytical results of the excavation water indicated a chloride concentration of 640 mg/L, exceeding the New Mexico Water Quality Control Commission (NMWQCC) standard for groundwater (Table 2). The chloride concentration of water in the excavation is below the chloride concentration in the upgradient background sample (BH01).

CONCLUSION

Enduring removed approximately 312 cubic yards of impacted soil from the Site. Laboratory analytical results of soil samples collected from the sidewalls and floor of the excavation confirm all impacted soil was removed. A groundwater sample collected from within the excavation contained concentrations of chloride exceeding NMWQCC standards. An off-pad upgradient background water sample also contained elevated chloride concentrations exceeding NMWQCC standards. The chloride concentration in the sample collected from the excavation of 640 mg/L was below the chloride concentration in the upgradient background sample of 790 mg/L. The elevated chloride concentration of 510 mg/kg in the upgradient background soil sample collected from 12' bgs, as compared to shallower soils sampled in the excavation, indicate the subsurface lithology contains naturally occurring chloride concentrations below the depth of the excavation that are likely affecting chloride concentration of the shallow groundwater. Elevated chloride concentrations in the excavation water are considered naturally occurring and present in shallow groundwater in the area. Enduring requests no further action for incident number NCS 1906550300.

LTE believes that it has performed the services summarized in this report in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental profession practicing at the same time and under similar conditions in the area of the project.

Sincerely,

LT ENVIRONMENTAL, INC.

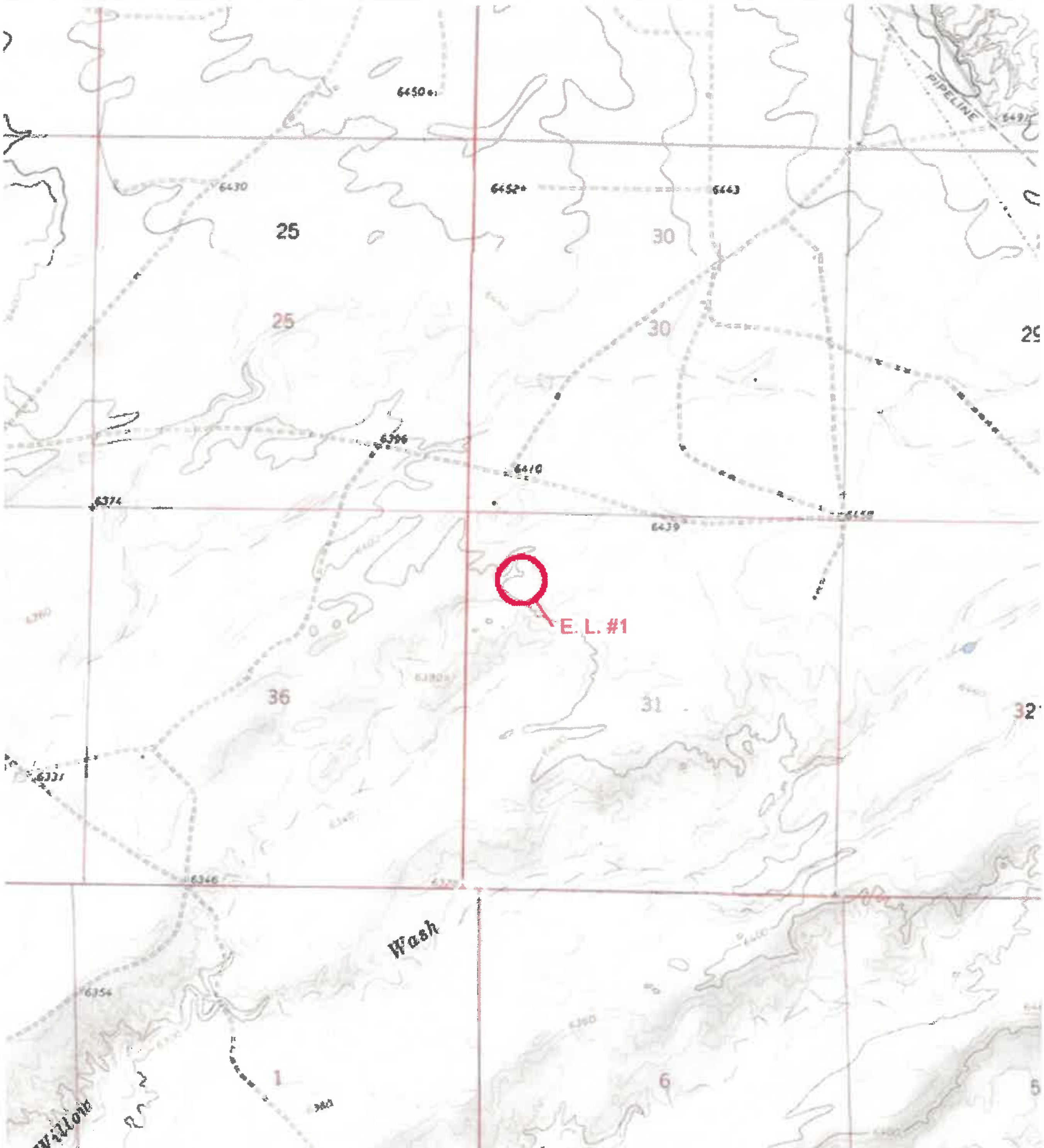
Devin Hencmann
Project Geologist

Ashley Ager M.S., P.G.
Senior Geologist

Attachments:

Figure 1 – Site Location Map
Figure 2 – Site Map
Table 1 – Soil Analytical Results
Table 2 – Excavation and Background Water Analytical Results
Attachment 1 – Laboratory Analytical Reports
Attachment 2 – Photo Log

FIGURES



LEGEND

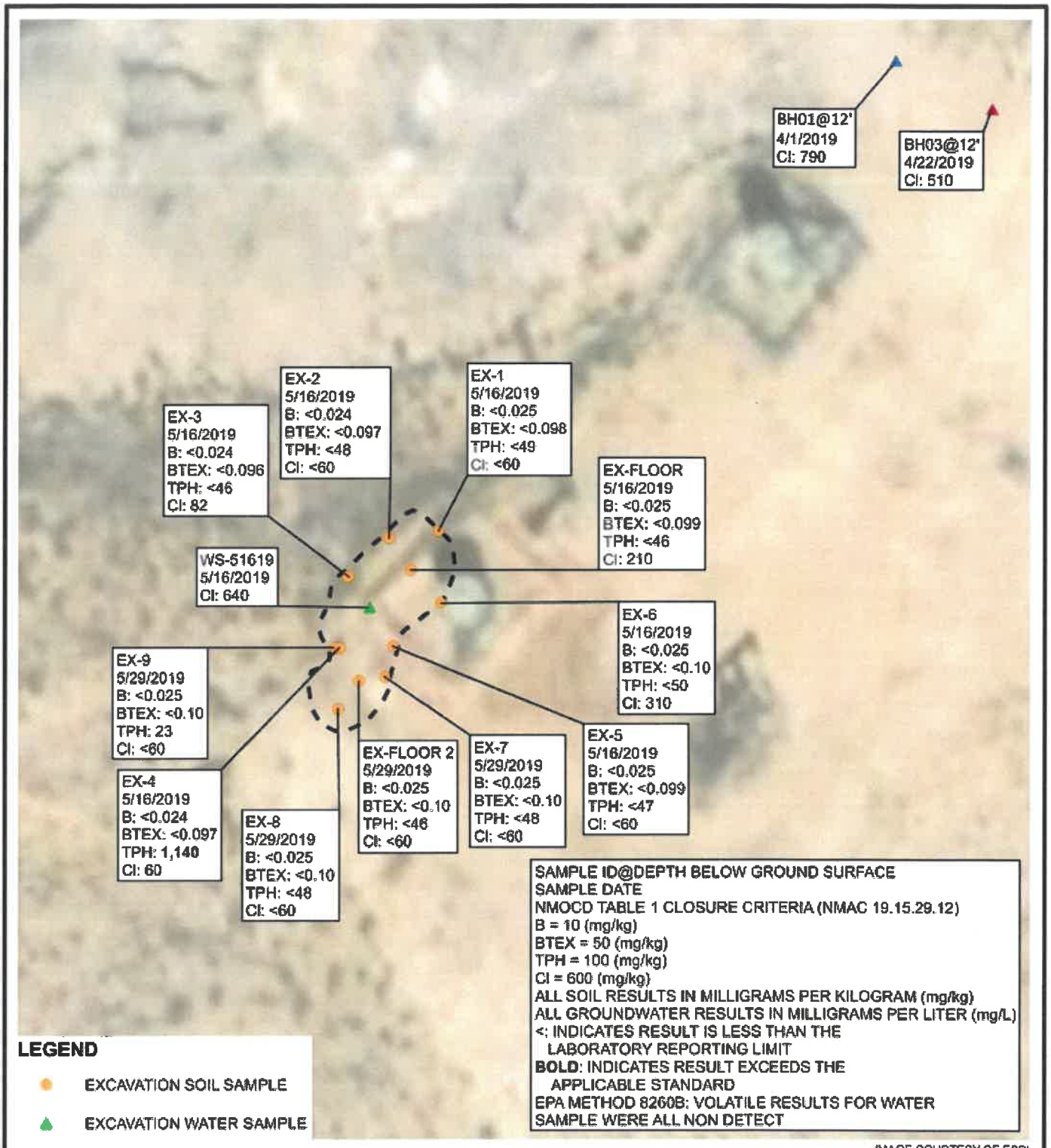
○ SITE LOCATION

0 2,000 4,000

Feet

N

FIGURE 1
SITE LOCATION MAP
E. L. #1
LOT 1 SEC 31-T25N-R11W
SAN JUAN COUNTY, NEW MEXICO
ENDURING RESOURCES, LLC



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
TPH – TOTAL PETROLEUM HYDROCARBONS
Cl - CHLORIDE
NMAC – NEW MEXICO ADMINISTRATIVE CODE
NMOCD – NEW MEXICO OIL CONSERVATION DIVISION

FIGURE 2
SITE MAP
E. L. #1
LOT 1 SEC 31-T25N-R11W
SAN JUAN COUNTY, NEW MEXICO
ENDURING RESOURCES, LLC

P:\Enduring Resources\GIS\MXD\07791900S EL #1\07791900S FIG2 EXCAVATION 2019.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

E.L. #1
ENDURING RESOURCES LLC.
SAN JUAN COUNTY, NEW MEXICO

Sample Name	Sample Date	PID Field Screening Result (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
EX-1	5/16/2019	19.4	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<9.7	<49	<49	<60
EX-2	5/16/2019	16.1	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	<9.6	<48	<48	<60
EX-3	5/16/2019	8.5	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.2	<46	<46	82
EX-4	5/16/2019	112.1	<0.024	<0.049	<0.049	<0.097	<0.097	<4.9	660	780	**1,140**	60
EX-5	5/16/2019	14.3	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.5	<47	<47	<60
EX-6	5/16/2019	13.3	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.9	<50	<50	310
EX-7	5/29/2019	21.6	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.6	<48	<48	<60
EX-8	5/29/2019	18.4	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.8	<48	<48	<60
EX-9	5/29/2019	20.3	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	23	<51	23	<60
EX-Floor	5/16/2019	11.1	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.1	<46	<46	210
EX-Floor 2	5/29/2019	21.1	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.1	<46	<46	<60
BH03 (background sample)	4/15/2019	0.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	510
NMOCD Table 1 Closure Criteria			**10**	NE	NE	NE	**50**	NE	NE	NE	**100**	**600**

Notes:

BTEX - benzene, toluene, ethylbenzene, and total xylenes
DRO - diesel range organics
GRO - gasoline range organics
mg/kg - milligrams per kilogram
MRO - motor oil range organics
NA - not analyzed
NE - not established
Bold - Indicates result exceeds the applicable regulatory standard
< - Indicates result is below laboratory reporting limits
NMOCD - New Mexico Oil Conservation Division
PID - photoionization detector
ppm - parts per million
TPH - total petroleum hydrocarbons

TABLE 2
EXCAVATION AND BACKGROUND WATER ANALYTICAL RESULTS

E.L. #1
ENDURING RESOURCES
SAN JUAN COUNTY, NEW MEXICO

Analyte	NMWQCC Standard	Unit	WS-51619	BH01 (Background water)
			5/16/2019	4/1/2019
USEPA Method 300.0: Anions				
chloride	250	mg/L	640	790
USEPA Method 8260B - Volatiles				
benzene	10	µg/L	<1.0	NA
toluene	750	µg/L	<1.0	NA
ethylbenzene	750	µg/L	<1.0	NA
methyl tert-butyl ether (MTBE)	NE	µg/L	<1.0	NA
1,2,4-trimethylbenzene	620	µg/L	<1.0	NA
1,3,5-trimethylbenzene	NE	µg/L	<1.0	NA
1,2-dichloroethane (EDC)	10	µg/L	<1.0	NA
1,2-dibromoethane (EDB)	NE	µg/L	<1.0	NA
naphthalene	NE	µg/L	<2.0	NA
1-methylnaphthalene	NE	µg/L	<4.0	NA
2-methylnaphthalene	NE	µg/L	<4.0	NA
acetone	NE	µg/L	<10	NA
bromobenzene	NE	µg/L	<1.0	NA
bromodichloromethane	NE	µg/L	<1.0	NA
bromoform	NE	µg/L	<1.0	NA
bromomethane	NE	µg/L	<3.0	NA
2-butanone	NE	µg/L	<10	NA
carbon disulfide	NE	µg/L	<10	NA
carbon tetrachloride	10	µg/L	<1.0	NA
chlorobenzene	NE	µg/L	<1.0	NA
chloroethane	NE	µg/L	<2.0	NA
chloroform	100	µg/L	<1.0	NA
chloromethane	NE	µg/L	<3.0	NA
2-chlorotoluene	NE	µg/L	<1.0	NA
4-chlorotoluene	NE	µg/L	<1.0	NA
cis-1,2-DCE	NE	µg/L	<1.0	NA
cis-1,3-dichloropropene	NE	µg/L	<1.0	NA
1,2-dibromo-3-chloropropane	NE	µg/L	<2.0	NA
dibromochloromethane	NE	µg/L	<1.0	NA
dibromomethane	NE	µg/L	<1.0	NA
1,2-dichlorobenzene	NE	µg/L	<1.0	NA
1,3-dichlorobenzene	NE	µg/L	<1.0	NA
1,4-dichlorobenzene	NE	µg/L	<1.0	NA
dichlorodifluoromethane	NE	µg/L	<1.0	NA
1,1-dichloroethane	25	µg/L	<1.0	NA
1,1-dichloroethene	5	µg/L	<1.0	NA
1,2-dichloropropane	NE	µg/L	<1.0	NA
1,3-dichloropropane	NE	µg/L	<1.0	NA
2,2-dichloropropane	NE	µg/L	<2.0	NA
1,1-dichloropropene	NE	µg/L	<1.0	NA
hexachlorobutadiene	NE	µg/L	<1.0	NA

TABLE 2
EXCAVATION AND BACKGROUND WATER ANALYTICAL RESULTS

E.L. #1
ENDURING RESOURCES
SAN JUAN COUNTY, NEW MEXICO

Analyte	NMWQCC Standard	Unit	WS-51619	BH01 (Background water)
			5/16/2019	4/1/2019
2-hexanone	NE	µg/L	<10	NA
isopropylbenzene	NE	µg/L	<1.0	NA
4-isopropytoluene	NE	µg/L	<1.0	NA
4-methyl-2-pentanone	NE	µg/L	<10	NA
methylene chloride	100	µg/L	<3.0	NA
n-butylbenzene	NE	µg/L	<3.0	NA
n-propylbenzene	NE	µg/L	<1.0	NA
sec-butylbenzene	NE	µg/L	<1.0	NA
styrene	NE	µg/L	<1.0	NA
tert-butylbenzene	NE	µg/L	<1.0	NA
1,1,1,2-tetrachloroethane	NE	µg/L	<1.0	NA
1,1,2,2-tetrachloroethane	10	µg/L	<2.0	NA
tetrachloroethene (PCE)	20	µg/L	<1.0	NA
trans-1,2-DCE	NE	µg/L	<1.0	NA
trans-1,3-dichloropropene	NE	µg/L	<1.0	NA
1,2,3-trichlorobenzene	NE	µg/L	<1.0	NA
1,2,4-trichlorobenzene	NE	µg/L	<1.0	NA
1,1,1-trichloroethane	60	µg/L	<1.0	NA
1,1,2-trichloroethane	10	µg/L	<1.0	NA
trichloroethene (TCE)	100	µg/L	<1.0	NA
trichlorofluoromethane	NE	µg/L	<1.0	NA
1,2,3-trichloropropane	NE	µg/L	<2.0	NA
vinyl chloride	1	µg/L	<1.0	NA
xylenes, total	620	µg/L	<1.5	NA

Notes:

µg/L - micrograms per liter

mg/L - milligrams per liter

BOLD - indicates concentration exceeds the NMWQCC standard

NA - not analyzed

NE - not established

NMWQCC - New Mexico Water Quality Control Commission

USEPA - Environmental Protection Agency

ATTACHMENT 1 [LABORATORY ANALYTICAL REPORTS]

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

May 28, 2019

James McDaniel
Enduring Resources
332 Road 3100
Aztec, NM 87140
TEL:
FAX

RE: EL 1 OrderNo.: 1905883

Dear James McDaniel:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/17/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL 1
Lab ID: 1905883-001 **Matrix:** AQUEOUS

Client Sample ID: WS-51619
Collection Date: 5/16/2019 10:20:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	640	50	*	mg/L	100	5/17/2019 5:39:06 PM	R59956
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Toluene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Ethylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Naphthalene	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1-Methylnaphthalene	ND	4.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
2-Methylnaphthalene	ND	4.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Acetone	ND	10		µg/L	1	5/21/2019 11:29:40 AM	A60033
Bromobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Bromodichloromethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Bromoform	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Bromomethane	ND	3.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
2-Butanone	ND	10		µg/L	1	5/21/2019 11:29:40 AM	A60033
Carbon disulfide	ND	10		µg/L	1	5/21/2019 11:29:40 AM	A60033
Carbon Tetrachloride	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Chlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Chloroethane	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Chloroform	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Chloromethane	ND	3.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
2-Chlorotoluene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
4-Chlorotoluene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
cis-1,2-DCE	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Dibromochloromethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Dibromomethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1-Dichloroethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1-Dichloroethene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2-Dichloropropane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033

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 Quantative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Client Sample ID: WS-51619
Project: EL 1
Collection Date: 5/16/2019 10:20:00 AM
Lab ID: 1905883-001
Matrix: AQUEOUS
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,3-Dichloropropane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
2,2-Dichloropropane	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1-Dichloropropene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Hexachlorobutadiene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
2-Hexanone	ND	10		µg/L	1	5/21/2019 11:29:40 AM	A60033
Isopropylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
4-Isopropyltoluene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
4-Methyl-2-pentanone	ND	10		µg/L	1	5/21/2019 11:29:40 AM	A60033
Methylene Chloride	ND	3.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
n-Butylbenzene	ND	3.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
n-Propylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
sec-Butylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Styrene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
tert-Butylbenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
trans-1,2-DCE	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Trichlorofluoromethane	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Vinyl chloride	ND	1.0		µg/L	1	5/21/2019 11:29:40 AM	A60033
Xylenes, Total	ND	1.5		µg/L	1	5/21/2019 11:29:40 AM	A60033
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	5/21/2019 11:29:40 AM	A60033
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	5/21/2019 11:29:40 AM	A60033
Surr: Dibromofluoromethane	89.4	70-130		%Rec	1	5/21/2019 11:29:40 AM	A60033
Surr: Toluene-d8	96.8	70-130		%Rec	1	5/21/2019 11:29:40 AM	A60033

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Client Sample ID: EX-1
Project: EL 1
Collection Date: 5/16/2019 10:30:00 AM
Lab ID: 1905883-002 **Matrix:** SOIL **Received Date:** 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	5/22/2019 12:42:34 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/20/2019 7:32:00 PM	44997
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/20/2019 7:32:00 PM	44997
Surr: DNOP	90.3	70-130		%Rec	1	5/20/2019 7:32:00 PM	44997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/20/2019 3:20:11 PM	44995
Surr: BFB	98.4	73.8-119		%Rec	1	5/20/2019 3:20:11 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/20/2019 3:20:11 PM	44995
Toluene	ND	0.049		mg/Kg	1	5/20/2019 3:20:11 PM	44995
Ethylbenzene	ND	0.049		mg/Kg	1	5/20/2019 3:20:11 PM	44995
Xylenes, Total	ND	0.098		mg/Kg	1	5/20/2019 3:20:11 PM	44995
Surr: 4-Bromofluorobenzene	96.7	80-120		%Rec	1	5/20/2019 3:20:11 PM	44995

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL I
Lab ID: 1905883-003 **Matrix:** SOIL

Client Sample ID: EX-2
Collection Date: 5/16/2019 10:35:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	5/22/2019 1:19:48 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/21/2019 11:22:02 AM	45011
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/21/2019 11:22:02 AM	45011
Surr: DNOP	149	70-130	S	%Rec	1	5/21/2019 11:22:02 AM	45011
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/20/2019 3:43:28 PM	44995
Surr: BFB	98.8	73.8-119		%Rec	1	5/20/2019 3:43:28 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/20/2019 3:43:28 PM	44995
Toluene	ND	0.049		mg/Kg	1	5/20/2019 3:43:28 PM	44995
Ethylbenzene	ND	0.049		mg/Kg	1	5/20/2019 3:43:28 PM	44995
Xylenes, Total	ND	0.097		mg/Kg	1	5/20/2019 3:43:28 PM	44995
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	5/20/2019 3:43:28 PM	44995

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL 1
Lab ID: 1905883-004 **Matrix:** SOIL

Client Sample ID: EX-3
Collection Date: 5/16/2019 10:40:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	82	60		mg/Kg	20	5/22/2019 1:32:13 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/21/2019 11:44:08 AM	45011
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/21/2019 11:44:08 AM	45011
Surr: DNOP	119	70-130		%Rec	1	5/21/2019 11:44:08 AM	45011
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/20/2019 4:06:41 PM	44995
Surr: BFB	100	73.8-119		%Rec	1	5/20/2019 4:06:41 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/20/2019 4:06:41 PM	44995
Toluene	ND	0.048		mg/Kg	1	5/20/2019 4:06:41 PM	44995
Ethylbenzene	ND	0.048		mg/Kg	1	5/20/2019 4:06:41 PM	44995
Xylenes, Total	ND	0.096		mg/Kg	1	5/20/2019 4:06:41 PM	44995
Surr: 4-Bromofluorobenzene	97.5	80-120		%Rec	1	5/20/2019 4:06:41 PM	44995

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL 1
Lab ID: 1905883-005 **Matrix:** SOIL

Client Sample ID: EX-4
Collection Date: 5/16/2019 10:45:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	60	60		mg/Kg	20	5/22/2019 1:44:38 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	440	100		mg/Kg	10	5/24/2019 11:18:30 AM	45162
Motor Oil Range Organics (MRO)	510	500		mg/Kg	10	5/24/2019 11:18:30 AM	45162
Surr: DNOP	0	70-130	S	%Rec	10	5/24/2019 11:18:30 AM	45162
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/20/2019 5:16:26 PM	44995
Surr: BFB	106	73.8-119		%Rec	1	5/20/2019 5:16:26 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/20/2019 5:16:26 PM	44995
Toluene	ND	0.049		mg/Kg	1	5/20/2019 5:16:26 PM	44995
Ethylbenzene	ND	0.049		mg/Kg	1	5/20/2019 5:16:26 PM	44995
Xylenes, Total	ND	0.097		mg/Kg	1	5/20/2019 5:16:26 PM	44995
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	5/20/2019 5:16:26 PM	44995

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 Quantative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Client Sample ID: EX-5
Project: EL 1
Collection Date: 5/16/2019 10:50:00 AM
Lab ID: 1905883-006 **Matrix:** SOIL **Received Date:** 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	ND	60		mg/Kg	20	5/22/2019 1:57:03 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/21/2019 12:28:12 PM	45011
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/21/2019 12:28:12 PM	45011
Surr: DNOP	90.6	70-130		%Rec	1	5/21/2019 12:28:12 PM	45011
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/20/2019 5:39:39 PM	44995
Surr: BFB	105	73.8-119		%Rec	1	5/20/2019 5:39:39 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/20/2019 5:39:39 PM	44995
Toluene	ND	0.050		mg/Kg	1	5/20/2019 5:39:39 PM	44995
Ethylbenzene	ND	0.050		mg/Kg	1	5/20/2019 5:39:39 PM	44995
Xylenes, Total	ND	0.099		mg/Kg	1	5/20/2019 5:39:39 PM	44995
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/20/2019 5:39:39 PM	44995

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 Quantative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL 1
Lab ID: 1905883-007 **Matrix:** SOIL

Client Sample ID: EX-6
Collection Date: 5/16/2019 10:55:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	310	60		mg/Kg	20	5/22/2019 2:09:27 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/21/2019 1:56:07 PM	45011
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/21/2019 1:56:07 PM	45011
Surr: DNOP	90.4	70-130		%Rec	1	5/21/2019 1:56:07 PM	45011
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/20/2019 6:02:55 PM	44995
Surr: BFB	104	73.8-119		%Rec	1	5/20/2019 6:02:55 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/20/2019 6:02:55 PM	44995
Toluene	ND	0.050		mg/Kg	1	5/20/2019 6:02:55 PM	44995
Ethylbenzene	ND	0.050		mg/Kg	1	5/20/2019 6:02:55 PM	44995
Xylenes, Total	ND	0.10		mg/Kg	1	5/20/2019 6:02:55 PM	44995
Surr: 4-Bromofluorobenzene	99.0	80-120		%Rec	1	5/20/2019 6:02:55 PM	44995

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 Quantative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: EL 1
Lab ID: 1905883-008 **Matrix:** SOIL

Client Sample ID: EX-Floor
Collection Date: 5/16/2019 11:00:00 AM
Received Date: 5/17/2019 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	210	60		mg/Kg	20	5/22/2019 2:21:51 AM	45090
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/21/2019 1:12:13 PM	45011
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/21/2019 1:12:13 PM	45011
Surr: DNOP	91.6	70-130		%Rec	1	5/21/2019 1:12:13 PM	45011
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/20/2019 6:26:14 PM	44995
Surr: BFB	104	73.8-119		%Rec	1	5/20/2019 6:26:14 PM	44995
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	5/20/2019 6:26:14 PM	44995
Toluene	ND	0.050		mg/Kg	1	5/20/2019 6:26:14 PM	44995
Ethylbenzene	ND	0.050		mg/Kg	1	5/20/2019 6:26:14 PM	44995
Xylenes, Total	ND	0.099		mg/Kg	1	5/20/2019 6:26:14 PM	44995
Surr: 4-Bromofluorobenzene	99.7	80-120		%Rec	1	5/20/2019 6:26:14 PM	44995

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB-45090**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **45090**	RunNo: **60060**
Prep Date: **5/21/2019**	Analysis Date: **5/21/2019**	SeqNo: **2028103** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-45090**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **45090**	RunNo: **60060**
Prep Date: **5/21/2019**	Analysis Date: **5/21/2019**	SeqNo: **2028104** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.9	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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R59956**	RunNo: **59956**
Prep Date:	Analysis Date: **5/17/2019**	SeqNo: **2024287** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R59956**	RunNo: **59956**
Prep Date:	Analysis Date: **5/17/2019**	SeqNo: **2024288** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.9	0.50	5.000	0	98.9	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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB-44997**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **44997**	RunNo: **60018**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2026297** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		115	70	130			

Sample ID: **LCS-44997**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **44997**	RunNo: **60018**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2026299** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	107	63.9	124			
Surr: DNOP	5.2		5.000		105	70	130			

Sample ID: **MB-45011**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45011**	RunNo: **60017**
Prep Date: **5/17/2019**	Analysis Date: **5/21/2019**	SeqNo: **2026814** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		119	70	130			

Sample ID: **LCS-45011**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45011**	RunNo: **60017**
Prep Date: **5/17/2019**	Analysis Date: **5/22/2019**	SeqNo: **2027290** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	71	10	50.00	0	141	63.9	124			S
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: **LCS-45021**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45021**	RunNo: **60017**
Prep Date: **5/20/2019**	Analysis Date: **5/21/2019**	SeqNo: **2027291** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.1	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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB-45021**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45021**	RunNo: **60017**
Prep Date: **5/20/2019**	Analysis Date: **5/21/2019**	SeqNo: **2027292** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.8		10.00		97.8	70	130			

Sample ID: **MB-45162**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45162**	RunNo: **60130**
Prep Date: **5/23/2019**	Analysis Date: **5/24/2019**	SeqNo: **2031736** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	70	130			

Sample ID: **LCS-45162**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45162**	RunNo: **60130**
Prep Date: **5/23/2019**	Analysis Date: **5/24/2019**	SeqNo: **2031737** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.0	63.9	124			
Surr: DNOP	4.6		5.000		91.8	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB-44995**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **44995**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2025524** 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	1000		1000		102	73.8	119			

Sample ID: **LCS-44995**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **44995**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2025525** Units: **mg/Kg**

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	80.1	123			
Surr: BFB	1200		1000		119	73.8	119			S

Sample ID: **MB-45012**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **45012**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/21/2019**	SeqNo: **2025549** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	73.8	119			

Sample ID: **LCS-45012**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **45012**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/21/2019**	SeqNo: **2025550** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		125	73.8	119			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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **MB-44995**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **44995**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2025566** Units: **mg/Kg**

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: **LCS-44995**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **44995**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/20/2019**	SeqNo: **2025567** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID: **MB-45012**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **45012**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/21/2019**	SeqNo: **2025591** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: **LCS-45012**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **45012**	RunNo: **60007**
Prep Date: **5/17/2019**	Analysis Date: **5/21/2019**	SeqNo: **2025592** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A60033**	RunNo: **60033**
Prep Date:	Analysis Date: **5/21/2019**	SeqNo: **2026750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

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 Quantative 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#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A60033**	RunNo: **60033**
Prep Date:	Analysis Date: **5/21/2019**	SeqNo: **2026750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130			
Surr: Dibromofluoromethane	8.7		10.00		87.2	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **A60033**	RunNo: **60033**
Prep Date:	Analysis Date: **5/21/2019**	SeqNo: **2026751** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	17	1.0	20.00	0	86.3	70	130			
Chlorobenzene	17	1.0	20.00	0	85.0	70	130			

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905883**

28-May-19

Client: Enduring Resources

Project: EL 1

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **A60033** RunNo: **60033**

Prep Date: Analysis Date: **5/21/2019** SeqNo: **2026751** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	93.6	70	130			
Trichloroethene (TCE)	16	1.0	20.00	0	81.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.1	70	130			
Surr: Dibromofluoromethane	8.7		10.00		86.5	70	130			
Surr: Toluene-d8	9.5		10.00		95.1	70	130			

Sample ID: **1905883-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **WS-51619** Batch ID: **A60033** RunNo: **60033**

Prep Date: Analysis Date: **5/21/2019** SeqNo: **2027308** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0.2962	104	70	130			
Toluene	18	1.0	20.00	0	90.4	70	130			
Chlorobenzene	18	1.0	20.00	0	90.7	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.5	67.6	130			
Trichloroethene (TCE)	16	1.0	20.00	0	82.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.8	70	130			
Surr: Dibromofluoromethane	8.6		10.00		86.2	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Sample ID: **1905883-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **WS-51619** Batch ID: **A60033** RunNo: **60033**

Prep Date: Analysis Date: **5/21/2019** SeqNo: **2027326** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0.2962	98.0	70	130	5.56	20	
Toluene	16	1.0	20.00	0	81.3	70	130	10.5	20	
Chlorobenzene	17	1.0	20.00	0	83.8	70	130	7.86	20	
1,1-Dichloroethene	18	1.0	20.00	0	88.8	67.6	130	9.35	20	
Trichloroethene (TCE)	15	1.0	20.00	0	76.6	70	130	7.08	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130	0	0	
Surr: Dibromofluoromethane	8.4		10.00		84.2	70	130	0	0	
Surr: Toluene-d8	8.9		10.00		89.3	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **ENDURING RESOURCE** Work Order Number: **1905883** RcptNo: **1**

Received By: **Jevon Campisi** **5/17/2019 7:40:00 AM** Jevon Campisi

Completed By: **Erin Melendrez** **5/17/2019 8:14:52 AM**

Reviewed By: YG 5/17/19

LB: DAD 5/17/19

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☑	No ☐	No VOA Vials ☐
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 5/17/19

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	2.6	Good	Yes			

Chain-of-Custody Record

Client: Enduring Resources
James McDaniel
Mailing Address: 200 Energy Ct.
Farmington, NM 87401
Phone #: 970-385-1096
email or Fax#: JmcDaniel@enduringresources.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☒ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: EL 1
Project #:
Project Manager:
James McDaniel - Enduring
Devin Hencmann - LTE
Sampler: Eric Carroll
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 2.7°C -0.1°C CF=2.6°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1905883	BTEX/ MTBE/ TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5/16	1020	Aqueous	WS - 5/16/19	3 VOA 250 ml	HCl Cool	-001							X	X		
	1030	Soil	Ex-1	1 4oz	Cool	-002	X	X					X			
	1035		Ex-2			-003	X	X					X			
	1040		Ex-3			-004	X	X					X			
	1045		Ex-4			-005	X	X					X			
	1050		Ex-5			-006	X	X					X			
	1055		Ex-6			-007	X	X					X			
	1100		Ex - Floor			-008	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/16/19	1330	Eric Carroll	Chris Walters		5/16/19	1330
5/16/19	1723	Chris Walters		courier	5-17-19	7:40

Remarks:
Please CC: dhencmann@ltenv.com
ecarroll@ltenv.com
Per Eric change to Rush 5/20/19 Due 5/22

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 11, 2019

Devin Hencmann
LTE
848 East 2nd Avenue
Durango, CO 81301
TEL: (970) 946-1093
FAX

RE: E L 1 OrderNo.: 1904072

Dear Devin Hencmann:

Hall Environmental Analysis Laboratory received 2 sample(s) on 4/2/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **1904072**
Date Reported: **4/11/2019**

CLIENT: LTE
Project: E L I

Lab Order: 1904072

Lab ID: 1904072-001
Collection Date: 4/1/2019 2:00:00 PM
Client Sample ID: BH01
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **smb**
Chloride	790	25	*	mg/L	50	4/6/2019 6:28:47 PM	R58968

Lab ID: 1904072-002
Collection Date: 4/1/2019 2:15:00 PM
Client Sample ID: Surface Water
Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: **smb**
Chloride	8.6	2.5		mg/L	5	4/2/2019 11:26:47 AM	R58850

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	PQL	Practical Quantitative Limit
RL	Reporting Detection Limit	W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904072**

11-Apr-19

Client: LTE
Project: E L I

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R58850**	RunNo: **58850**
Prep Date:	Analysis Date: **4/2/2019**	SeqNo: **1977931** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R58850**	RunNo: **58850**
Prep Date:	Analysis Date: **4/2/2019**	SeqNo: **1977932** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.8	0.50	5.000	0	95.2	90	110			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R58969**	RunNo: **58969**
Prep Date:	Analysis Date: **4/6/2019**	SeqNo: **1983709** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R58969**	RunNo: **58969**
Prep Date:	Analysis Date: **4/6/2019**	SeqNo: **1983710** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	5.1	0.50	5.000	0	103	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at testcode

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: 1904072 | RcptNo: 1

Received By: Anne Thorne 4/2/2019 8:12:00 AM

Completed By: Anne Thorne 4/2/2019 9:13:23 AM

Reviewed By: LB 4/2/19

labeled by: AT 04/02/19

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
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: _____

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	1.0	Good	Yes			

Chain-of-Custody Record

Client: LTE

Devin Hencmann

Mailing Address: 848 2nd AVE

Durango, CO. 81301

Phone #: 970-385-1096

email or Fax#: dhencmann@ltenv.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☒ EDD (Type) PDF

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: E.L. #1

Project #:

Project Manager: Devin Hencmann

Sampler: Eric Carroll

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 1.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1904012	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	Anions (F, Cl, Br, NO_3, NO_2, PO_4, SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
4/1	1400	GW	BH01	1 250	None	001							X			
↓	1415	↓	Surface water	1 250	None	002							X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/1	1600	Eric Carroll	Chris Walsh		4/1/19	1600
4/1/19	1803	Christian Walker			04/02/19	0812

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

April 22, 2019

Devin Hencmann
LTE
848 East 2nd Avenue
Durango, CO 81301
TEL:
FAX:

RE: EL 1 OrderNo.: 1904757

Dear Devin Hencmann:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/16/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1904757**
Date Reported: **4/22/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: EL 1
Lab ID: 1904757-001 **Matrix:** SOIL

Client Sample ID: BH03@8'
Collection Date: 4/15/2019 12:15:00 PM
Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/20/2019 12:29:49 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: EL I
Lab ID: 1904757-002 **Matrix:** SOIL

Client Sample ID: BH03@12'
Collection Date: 4/15/2019 12:30:00 PM
Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	510	60		mg/Kg	20	4/20/2019 1:31:51 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at receipt

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: EL 1
Lab ID: 1904757-003 **Matrix:** SOIL

Client Sample ID: BH04@7'
Collection Date: 4/15/2019 1:10:00 PM
Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	100	60		mg/Kg	20	4/20/2019 1:44:15 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: EL I
Lab ID: 1904757-004 **Matrix:** SOIL

Client Sample ID: BH04@10
Collection Date: 4/15/2019 1:30:00 PM
Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	79	61		mg/Kg	20	4/20/2019 1:56:40 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at receipt

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Client Sample ID: SS01
Project: EL 1
Collection Date: 4/15/2019 1:40:00 PM
Lab ID: 1904757-005 **Matrix:** SOIL **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	4/20/2019 2:09:04 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
Project: EL 1
Lab ID: 1904757-006

Client Sample ID: WS02
Collection Date: 4/15/2019 1:45:00 PM
Matrix: GROUNDWA **Received Date:** 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **smb**
Chloride	580	50	*	mg/L	100	4/17/2019 11:41:27 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at receipt

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904757**

22-Apr-19

Client: LTE
Project: EL 1

Sample ID: **MB-44456**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **44456**	RunNo: **59301**
Prep Date: **4/19/2019**	Analysis Date: **4/20/2019**	SeqNo: **1996731** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-44456**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **44456**	RunNo: **59301**
Prep Date: **4/19/2019**	Analysis Date: **4/20/2019**	SeqNo: **1996732** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
H	Holding times for preparation or analysis exceeded
PQL	Practical Quantitative Limit
W	Sample container temperature is out of limit as specified at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904757**

22-Apr-19

Client: LTE

Project: EL 1

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R59238**	RunNo: **59238**
Prep Date:	Analysis Date: **4/17/2019**	SeqNo: **1994357** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R59238**	RunNo: **59238**
Prep Date:	Analysis Date: **4/17/2019**	SeqNo: **1994358** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	95.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit
- H Holding times for preparation or analysis exceeded
- PQL Practical Quantitative Limit
- W Sample container temperature is out of limit as specified at testcode

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: LTE | Work Order Number: **1904757** | RcptNo: 1

Received By: Desiree Dominguez 4/16/2019 8:15:00 AM

Completed By: Leah Baca 4/16/2019 8:53:31 AM

Reviewed By: YG 4/16/19

Labeled by DAD 4/16/19

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
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 4/16/19

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	3.3	Good	Yes			
2	3.7	Good	Yes			

Chain-of-Custody Record

Client: LT Environmental
Devin Hencmann
Mailing Address: 848 E. 2nd Ave
Durango, CO 81301
Phone #: 970-385-1096
email or Fax#: dhencmann@ltenv.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: E.L. #1
Project #:
Project Manager: Devin Hencmann
Sampler: Eric Carroll
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (Including CF): 3.3°C, 3.7°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1904757	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, ~~NO3, NO2, PO4, SO4~~	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
4/15	1215	Soil	BH03 @ 8'	1 4oz	Cool	-001							X			
	1230		BH02 @ 12'	1		-002							X			
	1310		BH04 @ 7'			-003							X			
	1330		BH04 @ 10'			-004							X			
	1340		SS01			-005							X			
	1345	GW	WS02	1 500 ml		-006							X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/15	1435	Eric Carroll			4/15/19	1435
4/15/19	1821			Courier	4/16/19	8:15

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

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

June 04, 2019

James McDaniel
Enduring Resources
332 Road 3100
Aztec, NM 87140
TEL:
FAX

RE: E L 1 OrderNo.: 1905D91

Dear James McDaniel:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/30/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: E L 1
Lab ID: 1905D91-001 **Matrix:** SOIL

Client Sample ID: EX-7
Collection Date: 5/29/2019 2:40:00 PM
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 5:06:55 PM	45280
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/31/2019 9:37:16 AM	45272
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/31/2019 9:37:16 AM	45272
Surr: DNOP	102	70-130		%Rec	1	5/31/2019 9:37:16 AM	45272
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/31/2019 9:42:25 AM	45287
Surr: BFB	90.8	73.8-119		%Rec	1	5/31/2019 9:42:25 AM	45287
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/31/2019 9:42:25 AM	45287
Toluene	ND	0.048		mg/Kg	1	5/31/2019 9:42:25 AM	45287
Ethylbenzene	ND	0.048		mg/Kg	1	5/31/2019 9:42:25 AM	45287
Xylenes, Total	ND	0.096		mg/Kg	1	5/31/2019 9:42:25 AM	45287
Surr: 4-Bromofluorobenzene	95.9	80-120		%Rec	1	5/31/2019 9:42:25 AM	45287

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: E L 1
Lab ID: 1905D91-002 **Matrix:** SOIL

Client Sample ID: EX-8
Collection Date: 5/29/2019 2:50:00 PM
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 5:19:19 PM	45280
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/31/2019 10:01:42 AM	45272
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/31/2019 10:01:42 AM	45272
Surr: DNOP	105	70-130		%Rec	1	5/31/2019 10:01:42 AM	45272
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	5/31/2019 10:05:05 AM	45287
Surr: BFB	93.5	73.8-119		%Rec	1	5/31/2019 10:05:05 AM	45287
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	5/31/2019 10:05:05 AM	45287
Toluene	ND	0.041		mg/Kg	1	5/31/2019 10:05:05 AM	45287
Ethylbenzene	ND	0.041		mg/Kg	1	5/31/2019 10:05:05 AM	45287
Xylenes, Total	ND	0.081		mg/Kg	1	5/31/2019 10:05:05 AM	45287
Surr: 4-Bromofluorobenzene	98.5	80-120		%Rec	1	5/31/2019 10:05:05 AM	45287

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: E L 1
Lab ID: 1905D91-003 **Matrix:** SOIL

Client Sample ID: EX-9
Collection Date: 5/29/2019 3:00:00 PM
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 5:31:44 PM	45280
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	23	10		mg/Kg	1	5/31/2019 10:26:04 AM	45272
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	5/31/2019 10:26:04 AM	45272
Surr: DNOP	109	70-130		%Rec	1	5/31/2019 10:26:04 AM	45272
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/31/2019 10:27:42 AM	45287
Surr: BFB	93.8	73.8-119		%Rec	1	5/31/2019 10:27:42 AM	45287
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/31/2019 10:27:42 AM	45287
Toluene	ND	0.038		mg/Kg	1	5/31/2019 10:27:42 AM	45287
Ethylbenzene	ND	0.038		mg/Kg	1	5/31/2019 10:27:42 AM	45287
Xylenes, Total	ND	0.076		mg/Kg	1	5/31/2019 10:27:42 AM	45287
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	5/31/2019 10:27:42 AM	45287

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		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Enduring Resources
Project: E L 1
Lab ID: 1905D91-004 **Matrix:** SOIL

Client Sample ID: EX Floor 2
Collection Date: 5/29/2019 3:10:00 PM
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 6:08:58 PM	45280
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/31/2019 10:50:34 AM	45272
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/31/2019 10:50:34 AM	45272
Surr: DNOP	107	70-130		%Rec	1	5/31/2019 10:50:34 AM	45272
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	5/31/2019 10:50:22 AM	45287
Surr: BFB	91.6	73.8-119		%Rec	1	5/31/2019 10:50:22 AM	45287
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/31/2019 10:50:22 AM	45287
Toluene	ND	0.045		mg/Kg	1	5/31/2019 10:50:22 AM	45287
Ethylbenzene	ND	0.045		mg/Kg	1	5/31/2019 10:50:22 AM	45287
Xylenes, Total	ND	0.091		mg/Kg	1	5/31/2019 10:50:22 AM	45287
Surr: 4-Bromofluorobenzene	98.3	80-120		%Rec	1	5/31/2019 10:50:22 AM	45287

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905D91**

04-Jun-19

Client: Enduring Resources

Project: E L I

Sample ID: **MB-45280**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **45280**	RunNo: **60279**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2038238** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-45280**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **45280**	RunNo: **60279**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2038239** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.3	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#: **1905D91**

04-Jun-19

Client: Enduring Resources

Project: E L I

Sample ID: **LCS-45272**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45272**	RunNo: **60295**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2038175** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.3	63.9	124			
Surr: DNOP	4.4		5.000		88.7	70	130			

Sample ID: **MB-45272**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45272**	RunNo: **60295**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2038176** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	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#: **1905D91**

04-Jun-19

Client: Enduring Resources

Project: E L I

Sample ID: **MB-45276**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **45276**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039133** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.8	73.8	119			

Sample ID: **LCS-45276**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **45276**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039134** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		105	73.8	119			

Sample ID: **MB-45287**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **45287**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039157** 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	890		1000		89.4	73.8	119			

Sample ID: **LCS-45287**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **45287**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039158** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.5	80.1	123			
Surr: BFB	1100		1000		105	73.8	119			

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905D91**

04-Jun-19

Client: Enduring Resources

Project: E L 1

Sample ID: **MB-45276**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **45276**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039171** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		99.8	80	120			

Sample ID: **LCS-45276**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **45276**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039172** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: **MB-45287**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **45287**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039195** Units: **mg/Kg**

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	0.91		1.000		91.3	80	120			

Sample ID: **LCS-45287**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **45287**	RunNo: **60312**
Prep Date: **5/30/2019**	Analysis Date: **5/31/2019**	SeqNo: **2039196** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	105	80	120			
Toluene	1.0	0.050	1.000	0	104	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	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

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

Sample Log-In Check List

Client Name: ENDURING RESOURCE Work Order Number: 1905D91 RcptNo: 1

Received By: Anne Thorne 5/30/2019 8:00:00 AM

Completed By: Anne Thorne 5/30/2019 9:55:43 AM

Reviewed By: YG 5/30/19

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: ____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: DAD 5/30/19

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	3.6	Good	Yes			
2	2.6	Good	Yes			

Chain-of-Custody Record

Client: Enduring Resources
James McDaniel
Mailing Address: 200 Energy Ct.
Farmington NM 87410
Phone #: 970-385-1096
email or Fax#: JmcDaniel@enduringresources.com
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☑ EDD (Type) PDF

Turn-Around Time:
☐ Standard ☒ Rush 5/31/2019
Project Name: E.L. #1
Project #: 07791900G
Project Manager: James McDaniel - Enduring
Devin Hencmann - LTE
Sampler: Eric Carroll
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 3.4 +0.2 CF = 3.6°C
2.4 +0.2 CF = 2.6°C

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1905091	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
5/29/19	1440	Soil	Ex-7	1 4oz Mason Jar	Cool	001	X	X					X			
	1450		Ex-8			-002	X	X					X			
	1500		Ex-9			-003	X	X					X			
	1510		Ex-Floor 2			-004	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/29	1625				5/29/19	1625
5/29/19	1819				05/30/19	0800

Remarks:
Please CC: dhencmann@ltenv.com
ecarroll@ltenv.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

ATTACHMENT 2 [PHOTO LOG]