

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

Responsible Party

Responsible Party: LOGOS Operating, LLC	OGRID: 289408
Contact Name: Larissa Farrell	Contact Telephone: (505) 787-2027
Contact email: lfarrell@logosresourcesllc.com	Incident # (assigned by OCD) nVF1820751135
Contact mailing address 2010 Afton Place Farmington, NM 87401	

Location of Release Source

Latitude 36.237710 _____ Longitude -107.695149 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Heros 2307 09L Com 002H	Site Type: Well
Date Release Discovered 7/25/2018	API# (if applicable) 30-045-35687

Unit Letter	Section	Township	Range	County
L	09	23N	08W	San Juan County

Surface Owner: State Federal Tribal Private (Name: _____)

NMOC
OCT 25 2018
DISTRICT III

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input checked="" type="checkbox"/> Other (describe) Flowback Fluid	Volume/Weight Released (provide units) 120 BBLS	Volume/Weight Recovered (provide units) < 1BBL

Cause of Release: Water truck slipped off of the road and rolled into arroyo after leaving location. The back latch was broken off and 120 BBLS of flowback fluid was released into arroyo. The arroyo was not flowing at the time of incident. There was not standing water in arroyo when the incident took place. Hydrovac was on location to pull up as much as possible. Crews were laying soaker pads, are building 3 berms and hand-digging the contaminated soil and hauling off.

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Incident ID	
District RP	
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Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The amount of fluids released is greater than 25 BBLS and located in the adjacent arroyo.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes. Larissa Farrell called and spoke with Vanessa Fields with NMOCD at 8:34am and Emmanuel Adeloye with BLM at 9:44am on July 25, 2018. She reported the details of the incident and submitted initial C-141 on 7/26/2018.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: _____ _____ _____	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Larissa Farrell</u>	Title: <u>Environmental/Regulatory Technician</u>
Signature: 	Date: <u>7/26/2018</u>
email: <u>lfarrell@logosresourcesllc.com</u>	Telephone: <u>(505) 787-2027</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>630</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

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

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

Printed Name: Larissa Farrell Title: Environmental/Regulatory Technician

Signature:  Date: 10/24/2018

email: lfarrell@logosresourcesllc.com Telephone: (505) 787-2027

OCD Only

Received by: _____ Date: _____

Incident ID	
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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)

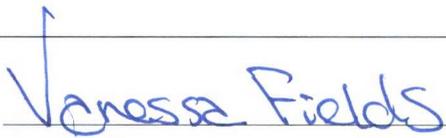
Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- 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: Larissa Farrell Title: Environmental/Regulatory Technician
 Signature:  Date: 10/24/2018
 email: lfarrell@logosresourcesllc.com Telephone: (505) 787-2027

OCD Only

Received by:  Date: 10/25/2018
 Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature:  Date: 11/5/2018

Fields, Vanessa, EMNRD

From: Fields, Vanessa, EMNRD
Sent: Monday, November 5, 2018 10:42 AM
To: Larissa Farrell
Cc: Tamra Sessions; Smith, Cory, EMNRD; 'Leigh Thomas'; aadeloye@blm.gov
Subject: Hero's 2307 09L Com 002H Inc# nVF1820751135 Remediation Plan COA

Larissa,

The OCD has approved the Remediation plan for the Heros 2307 09L Com 002H Inc# nVF1820751135 with the following conditions of approval.

- Remediation and closure of the Hero's 2307 09L Com 002H will need to be completed by December 5, 2018.
- Logos will need to submit a request for additional time to complete remediation per 19.15.29.12 B.(2)
- Logos must provide 48 hour business notification prior to confirmation sampling.

Please let me know if you should have any questions.

Thank you,
Vanessa Fields
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 119
Cell: (505) 419-0463
vanessa.fields@state.nm.us

October 24, 2018

Ms. Vanessa Fields
Environmental Specialist
New Mexico Oil Conservation Division
1000 Rio Brazos
Aztec, New Mexico 87410

**RE: Remediation Work Plan
Heros 23 08 09L COM 2H Release Response
NVS# 1820751135
LOGOS Resources II, LLC
San Juan County, New Mexico**

Dear Ms. Fields:

LT Environmental, Inc. (LTE), on behalf of LOGOS Resources II, LLC (LOGOS) presents the following Remediation Work Plan to address petroleum hydrocarbon impacted soil associated with the Heros 23 08 09L Com 2H production well (Site). The Site is located on the Nacimiento Formation outcrop southeast of Kimbeto Wash in the northwest quarter of the southwest quarter of Section 9, Township 23 North, Range 8 West, San Juan County, New Mexico, approximately 3.2 miles southeast of Nageezi, New Mexico (Figure 1).

BACKGROUND

On July 25, 2018, a water truck carrying flowback fluids slid off the access road to the Heros 23 08 09L Com 2H well pad and overturned in an adjacent wash. Approximately 120 barrels of liquid were released from the truck and traveled approximately 2,300 feet down the wash. LOGOS controlled the release by installing berms in three different areas within the wash. Less than one barrel of liquid was recovered with a vacuum truck and emergency response excavation activities ensued. Excavation activities included hand digging and using a skid steer to remove impacted soil within the wash. Approximately 284 cubic yards of impacted soil were removed.

Because the release occurred prior to August 14, 2018, the Site was ranked a 20 pursuant to the New Mexico Oil Conservation Division (NMOCD) 1993 *Guidelines for Remediation of Leaks, Spills and Releases*. The nearest permitted water well is approximately 2.6 miles west. Depth to water in the water well is 630 feet below ground surface (bgs). The release is located within a significant water feature. Based on these observations, the remediation action levels applied to the Site were 100 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (TPH), 10



mg/kg benzene, and 50 mg/kg total for the sum of benzene, toluene, ethylbenzene, and total xylenes (BTEX).

SITE CHARACTERIZATION

On August 1, 2018, and on September 12, 2018, LTE, on behalf of LOGOS, collected soil samples to identify remaining areas of non-compliance. As indicated on the attached Figure 2, the release footprint was segregated into representative 100-foot and 150-foot segments from which one 5-point composite soil sample was collected from 0 to 6 inches bgs from each segment to characterize each segment. The segments were designated as SS01 through SS27. All samples were analyzed for BTEX according to United States Environmental Protection Agency (USEPA) Method 8021, TPH by USEPA Method 8015, and chloride by USEPA 300. Samples collected were placed on ice and sealed in a cooler for delivery to Hall Environmental Analysis Laboratory, Inc. (HEAL) of Albuquerque, New Mexico, for analysis. Soil samples were labeled with the date and time of collection, sample name, sample collector's name, and parameters to be analyzed. Strict chain-of-custody protocol was documented including the date and time sampled, sample number, type of sample, sample collector's name and signature, preservative used, and analyses required.

Laboratory analytical results are presented on Table 1 and indicated that 17 of the segments had soil impacted with TPH concentrations exceeding the NMOCD Remediation Action Level of 100 mg/kg during the August 2018 sampling event. Benzene, BTEX, and chloride were in compliance with remediation action levels.

Additional discrete soil samples were collected on September 12, 2018, to delineate impacted soil identified in areas that were determined to be inaccessible for excavation due to physical site conditions (e.g., narrow incised channels and undercut channel banks). These areas are located within segments SS07, SS11, and SS13. Discrete samples were collected in the locations presented on Figure 3. The soil samples were collected and handled as previously described and analyzed for BTEX according to USEPA Method 8021, TPH by USEPA Method 8015, and chloride by USEPA 300. Laboratory analytical results for the delineation event are presented in Table 2. Delineation results indicated that impacted soil remains in segment SS07 at sample location SS7A and SS7E; however, impacted soil does not extend beyond SS7B and SS7C (Figure 3). Delineation results indicated that impacted soil remains in segment SS11 at sample location SS11C, but impacted soil does not extend beyond SS11B and SS11D (Figure 3). Due to the safety concerns and physical limitations for sampling the entirety of segment SS13, it is assumed that impacted soil remains between SS13A and SS13B although no impacts were observed in samples collected at SS13A and SS13B.





REMEDICATION WORK PLAN

LTE and LOGOS have prepared this Remediation Work Plan to achieve compliance with NMOCD Remediation Action Levels and to be protective of the public health and environment. Excavation activities will continue in the areas where impacted soil remains (SS01, SS05, SS07, SS08, SS09, SS10, SS11, SS13, SS14, SS15, SS16, SS18, SS19, SS21, SS22, SS23 and SS26) until source removal indicates compliance with cleanup goals. In addition to excavation, some areas of the Site are inaccessible to excavation equipment or unsafe for hand digging and will necessitate implementing an alternative remediation technology. These locations include areas between SS7B and SS7C, areas between SS11B and SS11D, and the area between SS13A and SS13B (Figure 3).

For these areas, LTE and LOGOS propose to apply Microblaze[®], a USEPA emergency response-approved proprietary blend of wetting agents, nutrients, and non-pathogenic bacteria, to the impacted soil via mechanical spray application. The biological amendment will work in harmony with the native conditions to enhance natural degradation, using oxygen from the ambient air, natural microbes, supplemental microbes, and supplemental electron acceptors. The microbes will promote hydrocarbon degradation and site remediation through metabolic processes, where the microbes oxidize organic compounds to release energy, build cellular material, and promote cellular processes. The amendment will allow the petroleum hydrocarbons to release from the sorbed state in the soil pore matrix, to be broken down into smaller species, to dissolve in the amendment and supplemental water, and will promote a biological oxidation reaction until there are no petroleum hydrocarbons remaining in the soil.

PERFORMANCE AND CONFIRMATION SAMPLING

Work will continue until all areas demonstrate compliance with NMOCD Remediation Action Levels.

The amendment will be applied two weeks after approval of this Remediation Work Plan. Performance sampling in the designated areas will be conducted 1-month post-application and then in 1-month intervals thereafter as necessary. Performance sampling will consist of collecting one composite sample from each area where amendment was applied. NMOCD will be given notice of the sampling events at least 48 hours prior to sampling activities.

Confirmation sampling will include collection of five-point composite samples from the previously designated 100-foot and 150-foot segments where results from previous sampling events indicated that additional excavation was required (Table 1). Additional excavation activities will be completed by November 1, 2018. Confirmation soil samples will be collected after excavated activities are complete and once performance sampling indicates impacted soil in areas where amendment was applied have been remediated. NMOCD will be given notice of the sampling events at least 48 hours prior to sampling activities.





REPORTING

Once confirmation sampling activities are completed and laboratory analytical results are received, LOGOS will provide the NMOCD with a summary report that will include the field screening and laboratory analytical results from each sampling event. The report will include a summary of performance monitoring sampling conducted in the areas where amendment was applied. When analytical results from sampling activities indicate soil has been remediated, LOGOS will provide the NMOCD with a final closure request.

LTE appreciates the opportunity to provide this Remediation Work Plan to the NMOCD. If you have any questions or comments regarding this Remediation Work Plan, do not hesitate to contact us at (970) 385-1096 or via electronic mail at dhencmann@ltenv.com or Larissa Farrell at (505) 787-2027 or at lfarrell@logosresourcesllc.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Devin Hencmann
Project Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Whitney Thomas (l1thomas@blm.gov)

Abiodun Adeloje (aadeloye@blm.gov)

Attachments:

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Delineation Map

Table 1 – Analytical Results

Table 2 – Analytical Results (Delineation Results)





FIGURES

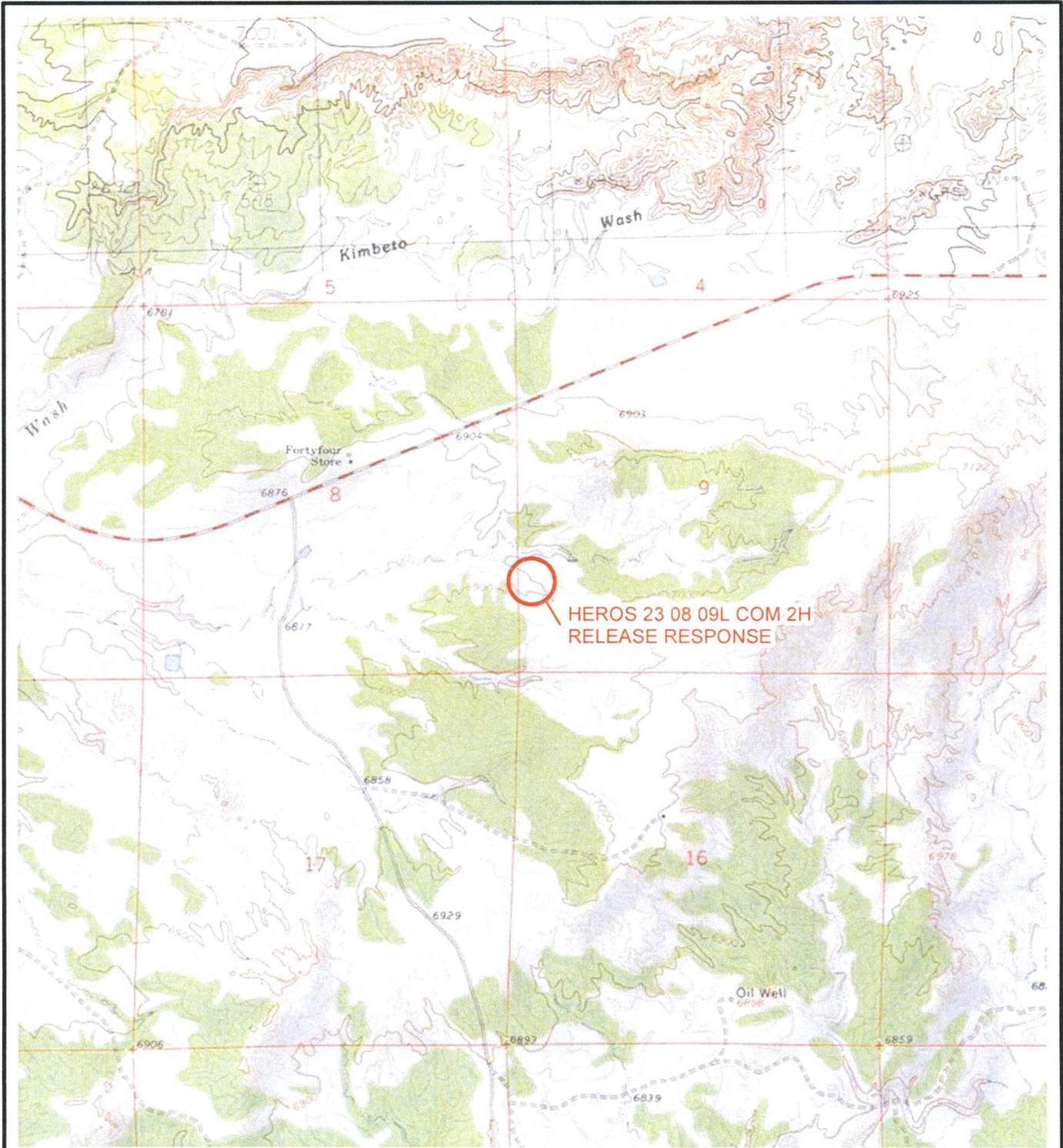


IMAGE COURTESY OF ESRI/USGS

LEGEND

 SITE LOCATION

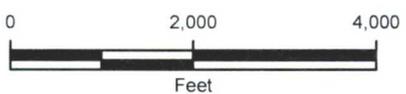


FIGURE 1
SITE LOCATION MAP
HEROS 23 08 09L COM 2H RELEASE RESPONSE
SAN JUAN COUNTY, NEW MEXICO



LOGOS RESOURCES II, LLC

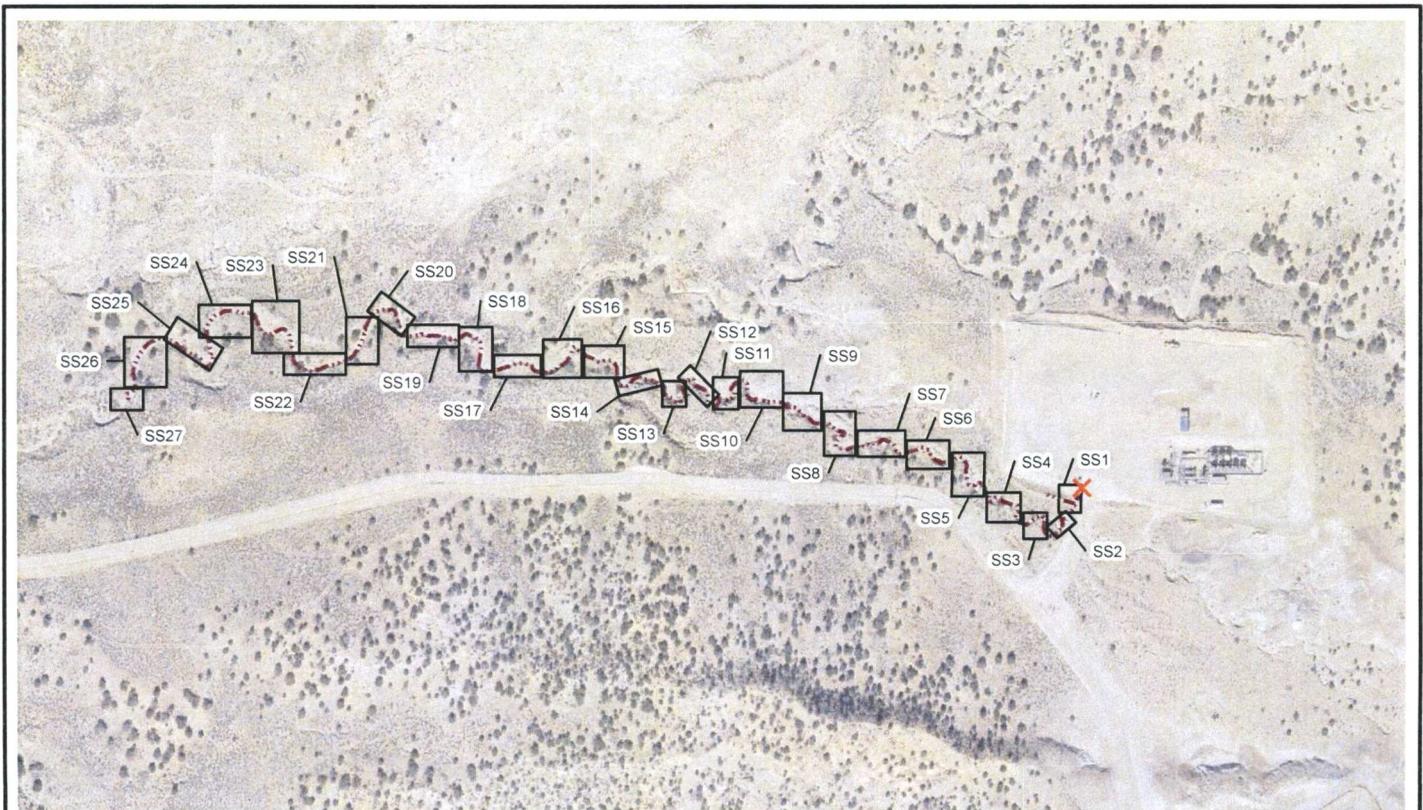


IMAGE COURTESY OF GOOGLE EARTH 2017

LEGEND

-  RELEASE LOCATION
-  RELEASE PATH
-  COMPOSITE SOIL SAMPLE

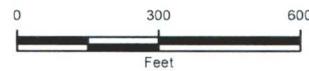


FIGURE 2
SITE MAP
 HEROS 23 08 09L COM 2H RELEASE RESPONSE
 SAN JUAN COUNTY, NEW MEXICO

LOGOS RESOURCES II, LLC



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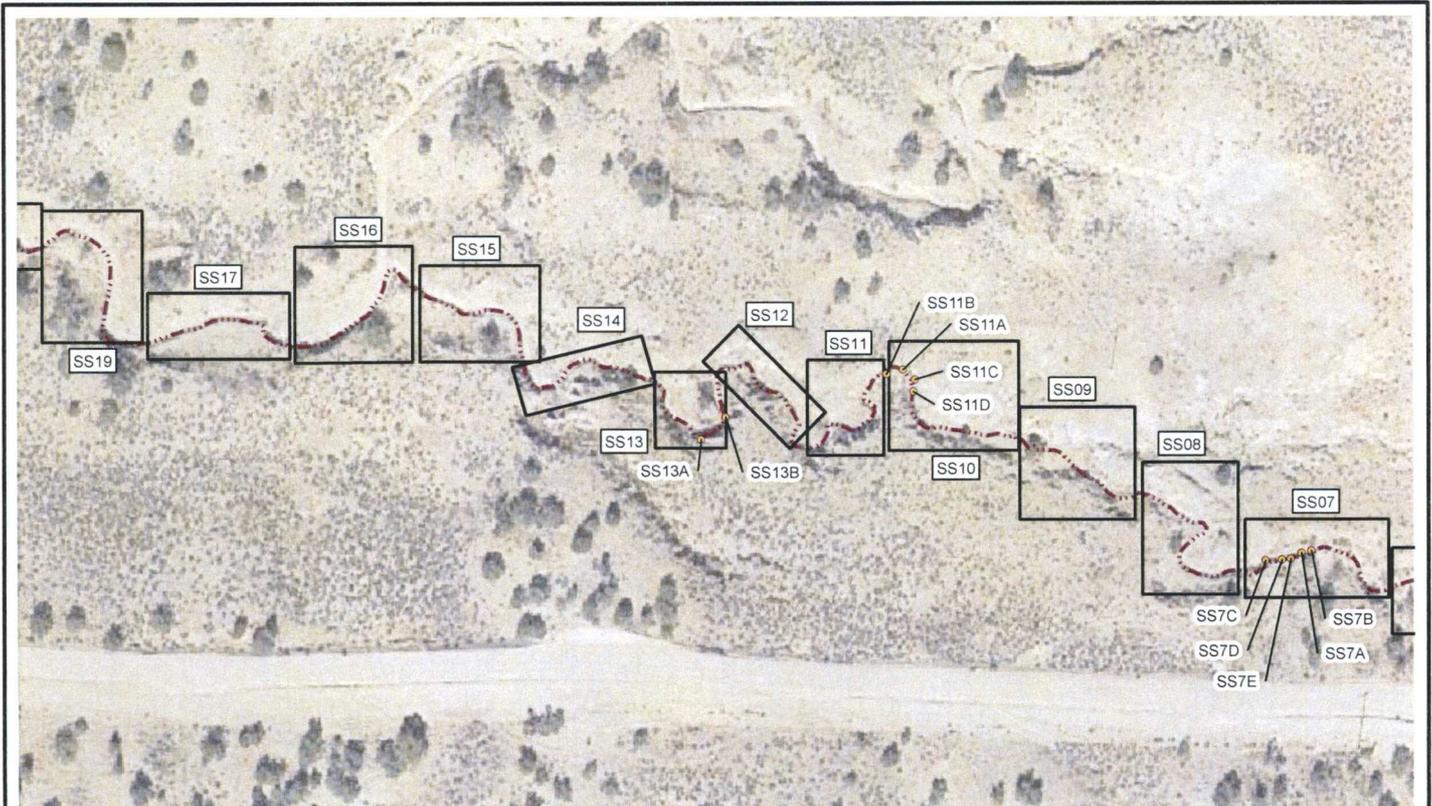


IMAGE COURTESY OF GOOGLE EARTH 2017

LEGEND

-  RELEASE LOCATION
-  DISCRETE SOIL SAMPLE
-  RELEASE PATH
-  COMPOSITE SOIL SAMPLE

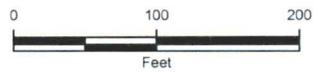


FIGURE 3
DELINERATION MAP
 HEROS 23 08 09L COM 2H RELEASE RESPONSE
 SAN JUAN COUNTY, NEW MEXICO



LOGOS RESOURCES II, LLC

P:\Logos Resources II, LLC\GIS\WAD\16218010_HEROS\16218010_FIG03_SITE_2018.mxd



TABLES

TABLE 1
SOIL ANALYTICAL RESULTS
HERO 23 08 09L COM 2H RELEASE RESPONSE
SAN JUAN COUNTY, NEW MEXICO
LOGOS RESOURCES II, LLC

Sample ID	Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	8/1/2018	6.1	<0.023	<0.047	<0.047	<0.094	<0.211	210	<4.7	100	310	35
SS02	8/1/2018	0.5	<0.025	<0.049	<0.049	<0.098	<0.221	14	<4.9	<50	14	150
SS03	8/1/2018	0.6	<0.025	<0.049	<0.049	<0.098	<0.221	<10	<4.9	<50	<64.9	52
SS04	8/1/2018	0.8	<0.025	<0.050	<0.050	<0.099	<0.224	<9.9	<5.0	<50	<64.9	160
SS05	8/1/2018	3.0	<0.024	<0.047	<0.047	<0.095	<0.213	95	<4.7	52	147	240
SS06	8/1/2018	4.1	<0.025	<0.050	<0.050	<0.10	<0.225	72	<5.0	<50	72	99
SS07	8/1/2018	15.4	<0.024	<0.048	<0.048	<0.095	<0.215	770	18	430	1,218	130
SS08	8/1/2018	32.3	<0.024	<0.048	<0.048	<0.095	<0.215	440	12	240	692	120
SS09	8/1/2018	8.8	<0.025	<0.050	<0.050	<0.10	<0.225	420	<5.0	230	650	140
SS10	8/1/2018	59.2	<0.025	<0.049	<0.049	<0.098	<0.221	20	20	600	1,920	47
SS11	8/1/2018	12.6	<0.024	<0.047	<0.047	<0.095	<0.213	1,300	16	600	1,816	140
SS12	8/1/2018	7.7	<0.025	<0.049	<0.049	<0.099	<0.222	98	<4.9	<50	98	42
SS13	8/1/2018	47.3	<0.024	<0.048	<0.048	<0.097	<0.217	1,400	18	560	1,978	70
SS14	8/1/2018	27.8	<0.024	<0.047	<0.047	<0.095	<0.213	860	13	520	1,393	350
SS15	8/1/2018	2.7	<0.024	<0.049	<0.049	<0.097	<0.219	320	<4.9	170	490	98
SS16	8/1/2018	23.2	<0.025	<0.050	<0.050	<0.10	<0.225	230	7.0	130	367	120
SS17	8/1/2018	4.7	<0.025	<0.049	<0.049	<0.098	<0.221	51	8.0	<48	59	83
SS18	8/1/2018	51.4	<0.023	<0.047	<0.047	<0.093	<0.210	640	24	330	994	33
SS19	8/1/2018	7.3	<0.023	<0.047	<0.047	<0.094	<0.211	170	<4.7	100	270	250
SS20	8/1/2018	2.3	<0.024	<0.047	<0.047	<0.094	<0.212	65	<4.7	<49	65	73
SS21	8/1/2018	26.1	<0.024	<0.048	<0.048	<0.097	<0.217	250	19	140	409	48
SS22	8/1/2018	27.4	<0.024	<0.048	<0.048	<0.097	<0.217	310	8.7	170	488.7	59
SS23	8/1/2018	2.8	<0.023	<0.046	<0.046	<0.093	<0.208	96	<4.6	57	153	37
SS24	8/1/2018	2.4	<0.023	<0.047	<0.047	<0.094	<0.211	39	<4.7	<50	<64	320
SS25	8/1/2018	1.9	<0.024	<0.047	<0.047	<0.095	<0.213	<9.8	<4.7	<49	<64	31
SS26	8/1/2018	1.5	<0.023	<0.047	<0.047	<0.094	<0.211	120	<4.7	70	190	260
SS27	8/1/2018	1.8	<0.023	<0.047	<0.047	<0.093	<0.210	<9.9	<4.7	<50	<65	600
NM/QCD Remediation Action Standard			10	NA	NA	NA	50	NA	NA	NA	100	600

Notes:
 BTEX - benzene, toluene, ethylbenzene, xylenes (total)
 DRO - diesel range organics
 GRO - gasoline range organics
 mg/kg - milligram per kilogram
 MRO - motor oil range organics
 PID - photoionization detector
 ppm - parts per million
 TPH - total petroleum hydrocarbons
BOLD - indicates result exceeds applicable standard
 < - indicates results is below laboratory detection limit



**TABLE 2
SOIL ANALYTICAL RESULTS (DELINEATION RESULTS)**

HERO 23 08 09L COM 2H RELEASE RESPONSE
SAN JUAN COUNTY, NEW MEXICO
LOGOS RESOURCES II, LLC

Sample ID	Date	PID Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS7A @ 6"	9/12/2018	1.7	<0.023	<0.046	<0.046	<0.093	<0.208	120	<4.6	84	204	<30
SS7A @ 3'	9/12/2018	NM	<0.024	<0.047	<0.047	<0.095	<0.213	<9.9	<4.7	<50	<64.6	<30
SS7D @ 6"	9/12/2018	0.2	<0.025	<0.049	<0.049	<0.099	<0.222	20	<4.9	<49	20	150
SS7D @ 2'	9/12/2018	0.8	<0.023	<0.047	<0.047	<0.093	<0.210	<9.9	<4.7	<49	<63.6	<30
SS7E @ 6"	9/12/2018	6.2	<0.025	<0.049	<0.049	<0.099	<0.222	44	<4.9	<50	44	31
SS11B @ 6"	9/12/2018	0.0	<0.025	<0.050	<0.050	<0.10	<0.225	<9.9	<5.0	<50	<64.9	<30
SS11B @ 2'	9/12/2018	0.2	<0.024	<0.048	<0.048	<0.095	<0.215	<9.8	<4.8	<49	<63.6	<30
SS11C @ 6"	9/12/2018	104	<0.024	<0.049	<0.049	<0.098	<0.220	170	<4.9	110	280	<30
SS13A @ 6"	9/12/2018	0.6	<0.025	<0.049	<0.049	<0.098	<0.221	<10	<4.9	<50	<64.9	38
SS13A @ 3'	9/12/2018	0.3	<0.024	<0.048	<0.048	<0.098	<0.215	<9.9	<4.8	<49	<63.7	48
SS13B @ 6"	9/12/2018	4.2	<0.024	<0.049	<0.049	<0.095	<0.220	48	<4.9	<50	48	64
NMOC Remediation Action Standard			10	NA	NA	NA	50	NA	NA	NA	100	600

Notes:

- BTEX - benzene, toluene, ethylbenzene, xylenes (total)
- DRO - diesel range organics
- GRO - gasoline range organics
- mg/kg - milligram per kilogram
- MRO - motor oil range organics
- NM - not measured
- PID - photoionization detector
- ppm - parts per million
- TPH - total petroleum hydrocarbons
- BOLD** - indicates result exceeds applicable standard
- < - indicates results is below laboratory detection limit





ATTACHMENT 1: LABORATORY ANALYTICAL REPORTS



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

August 14, 2018

Devin Hencmann

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: Heros 23 08 09L

OrderNo.: 1808128

Dear Devin Hencmann:

Hall Environmental Analysis Laboratory received 27 sample(s) on 8/2/2018 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS01

Project: Heros 23 08 09L

Collection Date: 8/1/2018 11:25:00 AM

Lab ID: 1808128-001

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	210	9.9		mg/Kg	1	8/3/2018 5:42:06 PM
Motor Oil Range Organics (MRO)	100	50		mg/Kg	1	8/3/2018 5:42:06 PM
Surr: DNOP	97.1	50.6-138		%Rec	1	8/3/2018 5:42:06 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	35	30		mg/Kg	20	8/6/2018 11:30:07 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/3/2018 6:20:44 PM
Toluene	ND	0.047		mg/Kg	1	8/3/2018 6:20:44 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/3/2018 6:20:44 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/3/2018 6:20:44 PM
Surr: 4-Bromofluorobenzene	137	70-130	S	%Rec	1	8/3/2018 6:20:44 PM
Surr: Toluene-d8	97.4	70-130		%Rec	1	8/3/2018 6:20:44 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/3/2018 6:20:44 PM
Surr: BFB	122	70-130		%Rec	1	8/3/2018 6:20:44 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS02

Project: Heros 23 08 09L

Collection Date: 8/1/2018 11:30:00 AM

Lab ID: 1808128-002

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	14	10		mg/Kg	1	8/3/2018 6:04:18 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/3/2018 6:04:18 PM
Surr: DNOP	98.4	50.6-138		%Rec	1	8/3/2018 6:04:18 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	150	30		mg/Kg	20	8/6/2018 12:32:10 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 6:43:59 PM
Toluene	ND	0.049		mg/Kg	1	8/3/2018 6:43:59 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2018 6:43:59 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2018 6:43:59 PM
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	8/3/2018 6:43:59 PM
Surr: Toluene-d8	97.9	70-130		%Rec	1	8/3/2018 6:43:59 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2018 6:43:59 PM
Surr: BFB	109	70-130		%Rec	1	8/3/2018 6:43:59 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE
 Project: Heros 23 08 09L
 Lab ID: 1808128-003

Matrix: SOIL

Client Sample ID: SS03
 Collection Date: 8/1/2018 11:35:00 AM
 Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/3/2018 6:26:34 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/3/2018 6:26:34 PM
Surr: DNOP	91.7	50.6-138		%Rec	1	8/3/2018 6:26:34 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	52	30		mg/Kg	20	8/6/2018 12:44:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 7:07:17 PM
Toluene	ND	0.049		mg/Kg	1	8/3/2018 7:07:17 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2018 7:07:17 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2018 7:07:17 PM
Surr: 4-Bromofluorobenzene	130	70-130	S	%Rec	1	8/3/2018 7:07:17 PM
Surr: Toluene-d8	97.7	70-130		%Rec	1	8/3/2018 7:07:17 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/3/2018 7:07:17 PM
Surr: BFB	116	70-130		%Rec	1	8/3/2018 7:07:17 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS04

Project: Heros 23 08 09L

Collection Date: 8/1/2018 11:40:00 AM

Lab ID: 1808128-004

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: IRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/3/2018 6:48:43 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/3/2018 6:48:43 PM
Surr: DNOP	98.0	50.6-138		%Rec	1	8/3/2018 6:48:43 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	160	30		mg/Kg	20	8/6/2018 12:56:59 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 7:30:34 PM
Toluene	ND	0.050		mg/Kg	1	8/3/2018 7:30:34 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2018 7:30:34 PM
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2018 7:30:34 PM
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	1	8/3/2018 7:30:34 PM
Surr: Toluene-d8	98.1	70-130		%Rec	1	8/3/2018 7:30:34 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2018 7:30:34 PM
Surr: BFB	115	70-130		%Rec	1	8/3/2018 7:30:34 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: SS05
 Project: Heros 23 08 09L Collection Date: 8/1/2018 11:45:00 AM
 Lab ID: 1808128-005 Matrix: SOIL Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	95	9.9		mg/Kg	1	8/3/2018 7:10:57 PM
Motor Oil Range Organics (MRO)	52	49		mg/Kg	1	8/3/2018 7:10:57 PM
Surr: DNOP	103	50.6-138		%Rec	1	8/3/2018 7:10:57 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	240	30		mg/Kg	20	8/6/2018 1:09:24 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/3/2018 7:53:46 PM
Toluene	ND	0.047		mg/Kg	1	8/3/2018 7:53:46 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/3/2018 7:53:46 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/3/2018 7:53:46 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	8/3/2018 7:53:46 PM
Surr: Toluene-d8	94.5	70-130		%Rec	1	8/3/2018 7:53:46 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/3/2018 7:53:46 PM
Surr: BFB	111	70-130		%Rec	1	8/3/2018 7:53:46 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS06

Project: Heros 23 08 09L

Collection Date: 8/1/2018 11:50:00 AM

Lab ID: 1808128-006

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	72	9.9		mg/Kg	1	8/3/2018 7:33:03 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/3/2018 7:33:03 PM
Surr: DNOP	102	50.6-138		%Rec	1	8/3/2018 7:33:03 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	99	30		mg/Kg	20	8/6/2018 1:21:49 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 8:16:51 PM
Toluene	ND	0.050		mg/Kg	1	8/3/2018 8:16:51 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2018 8:16:51 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2018 8:16:51 PM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	8/3/2018 8:16:51 PM
Surr: Toluene-d8	96.3	70-130		%Rec	1	8/3/2018 8:16:51 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2018 8:16:51 PM
Surr: BFB	110	70-130		%Rec	1	8/3/2018 8:16:51 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS07

Project: Heros 23 08 09L

Collection Date: 8/1/2018 11:55:00 AM

Lab ID: 1808128-007

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	770	9.9		mg/Kg	1	8/3/2018 7:55:16 PM
Motor Oil Range Organics (MRO)	430	50		mg/Kg	1	8/3/2018 7:55:16 PM
Surr: DNOP	113	50.6-138		%Rec	1	8/3/2018 7:55:16 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	130	30		mg/Kg	20	8/6/2018 1:34:13 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/3/2018 8:40:06 PM
Toluene	ND	0.048		mg/Kg	1	8/3/2018 8:40:06 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/3/2018 8:40:06 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/3/2018 8:40:06 PM
Surr: 4-Bromofluorobenzene	144	70-130	S	%Rec	1	8/3/2018 8:40:06 PM
Surr: Toluene-d8	97.4	70-130		%Rec	1	8/3/2018 8:40:06 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	18	4.8		mg/Kg	1	8/3/2018 8:40:06 PM
Surr: BFB	130	70-130	S	%Rec	1	8/3/2018 8:40:06 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS08

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:00:00 PM

Lab ID: 1808128-008

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	440	9.9		mg/Kg	1	8/3/2018 9:01:50 PM
Motor Oil Range Organics (MRO)	240	50		mg/Kg	1	8/3/2018 9:01:50 PM
Surr: DNOP	123	50.6-138		%Rec	1	8/3/2018 9:01:50 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	120	30		mg/Kg	20	8/6/2018 1:46:37 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/3/2018 9:03:12 PM
Toluene	ND	0.048		mg/Kg	1	8/3/2018 9:03:12 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/3/2018 9:03:12 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/3/2018 9:03:12 PM
Surr: 4-Bromofluorobenzene	141	70-130	S	%Rec	1	8/3/2018 9:03:12 PM
Surr: Toluene-d8	101	70-130		%Rec	1	8/3/2018 9:03:12 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	12	4.8		mg/Kg	1	8/3/2018 9:03:12 PM
Surr: BFB	126	70-130		%Rec	1	8/3/2018 9:03:12 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS09

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:05:00 PM

Lab ID: 1808128-009

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	420	10		mg/Kg	1	8/3/2018 10:08:23 PM
Motor Oil Range Organics (MRO)	230	50		mg/Kg	1	8/3/2018 10:08:23 PM
Surr: DNOP	122	50.6-138		%Rec	1	8/3/2018 10:08:23 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	140	30		mg/Kg	20	8/6/2018 1:59:02 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 9:49:26 PM
Toluene	ND	0.050		mg/Kg	1	8/3/2018 9:49:26 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/3/2018 9:49:26 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/3/2018 9:49:26 PM
Surr: 4-Bromofluorobenzene	135	70-130	S	%Rec	1	8/3/2018 9:49:26 PM
Surr: Toluene-d8	98.2	70-130		%Rec	1	8/3/2018 9:49:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/3/2018 9:49:26 PM
Surr: BFB	120	70-130		%Rec	1	8/3/2018 9:49:26 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS10

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:10:00 PM

Lab ID: 1808128-010

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	1300	97		mg/Kg	10	8/6/2018 11:36:45 AM
Motor Oil Range Organics (MRO)	600	480		mg/Kg	10	8/6/2018 11:36:45 AM
Surr: DNOP	0	50.6-138	S	%Rec	10	8/6/2018 11:36:45 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	47	30		mg/Kg	20	8/6/2018 2:36:16 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 10:12:32 PM
Toluene	ND	0.049		mg/Kg	1	8/3/2018 10:12:32 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2018 10:12:32 PM
Xylenes, Total	ND	0.098		mg/Kg	1	8/3/2018 10:12:32 PM
Surr: 4-Bromofluorobenzene	139	70-130	S	%Rec	1	8/3/2018 10:12:32 PM
Surr: Toluene-d8	97.7	70-130		%Rec	1	8/3/2018 10:12:32 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	20	4.9		mg/Kg	1	8/3/2018 10:12:32 PM
Surr: BFB	124	70-130		%Rec	1	8/3/2018 10:12:32 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS11

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:15:00 PM

Lab ID: 1808128-011

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	1200	99		mg/Kg	10	8/6/2018 12:25:55 PM
Motor Oil Range Organics (MRO)	600	500		mg/Kg	10	8/6/2018 12:25:55 PM
Surr: DNOP	0	50.6-138	S	%Rec	10	8/6/2018 12:25:55 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	140	30		mg/Kg	20	8/6/2018 2:48:40 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/3/2018 10:35:42 PM
Toluene	ND	0.047		mg/Kg	1	8/3/2018 10:35:42 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/3/2018 10:35:42 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/3/2018 10:35:42 PM
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	8/3/2018 10:35:42 PM
Surr: Toluene-d8	96.5	70-130		%Rec	1	8/3/2018 10:35:42 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	16	4.7		mg/Kg	1	8/3/2018 10:35:42 PM
Surr: BFB	122	70-130		%Rec	1	8/3/2018 10:35:42 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS12

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:20:00 PM

Lab ID: 1808128-012

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	98	10		mg/Kg	1	8/4/2018 2:11:55 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/4/2018 2:11:55 AM
Surr: DNOP	105	50.6-138		%Rec	1	8/4/2018 2:11:55 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	42	30		mg/Kg	20	8/6/2018 3:01:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/3/2018 11:22:03 PM
Toluene	ND	0.049		mg/Kg	1	8/3/2018 11:22:03 PM
Ethylbenzene	ND	0.049		mg/Kg	1	8/3/2018 11:22:03 PM
Xylenes, Total	ND	0.099		mg/Kg	1	8/3/2018 11:22:03 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	8/3/2018 11:22:03 PM
Surr: Toluene-d8	96.1	70-130		%Rec	1	8/3/2018 11:22:03 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/7/2018 5:23:12 PM
Surr: BFB	114	70-130		%Rec	1	8/7/2018 5:23:12 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS13

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:25:00 PM

Lab ID: 1808128-013

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	1400	98		mg/Kg	10	8/4/2018 3:18:38 AM
Motor Oil Range Organics (MRO)	560	490		mg/Kg	10	8/4/2018 3:18:38 AM
Surr: DNOP	0	50.6-138	S	%Rec	10	8/4/2018 3:18:38 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	70	30		mg/Kg	20	8/6/2018 3:13:28 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/4/2018 1:40:27 AM
Toluene	ND	0.048		mg/Kg	1	8/4/2018 1:40:27 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/4/2018 1:40:27 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/4/2018 1:40:27 AM
Surr: 4-Bromofluorobenzene	137	70-130	S	%Rec	1	8/4/2018 1:40:27 AM
Surr: Toluene-d8	94.1	70-130		%Rec	1	8/4/2018 1:40:27 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	18	4.8		mg/Kg	1	8/4/2018 1:40:27 AM
Surr: BFB	123	70-130		%Rec	1	8/4/2018 1:40:27 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS14

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:30:00 PM

Lab ID: 1808128-014

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	860	9.8		mg/Kg	1	8/6/2018 1:15:44 PM
Motor Oil Range Organics (MRO)	520	49		mg/Kg	1	8/6/2018 1:15:44 PM
Surr: DNOP	120	50.6-138		%Rec	1	8/6/2018 1:15:44 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	350	30		mg/Kg	20	8/6/2018 3:25:53 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/4/2018 2:03:37 AM
Toluene	ND	0.047		mg/Kg	1	8/4/2018 2:03:37 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/4/2018 2:03:37 AM
Xylenes, Total	ND	0.095		mg/Kg	1	8/4/2018 2:03:37 AM
Surr: 4-Bromofluorobenzene	136	70-130	S	%Rec	1	8/4/2018 2:03:37 AM
Surr: Toluene-d8	99.0	70-130		%Rec	1	8/4/2018 2:03:37 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	13	4.7		mg/Kg	1	8/4/2018 2:03:37 AM
Surr: BFB	120	70-130		%Rec	1	8/4/2018 2:03:37 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS15

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:35:00 PM

Lab ID: 1808128-015

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	320	9.8		mg/Kg	1	8/4/2018 5:31:50 AM
Motor Oil Range Organics (MRO)	170	49		mg/Kg	1	8/4/2018 5:31:50 AM
Surr: DNOP	105	50.6-138		%Rec	1	8/4/2018 5:31:50 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	98	30		mg/Kg	20	8/6/2018 3:38:18 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/4/2018 2:26:39 AM
Toluene	ND	0.049		mg/Kg	1	8/4/2018 2:26:39 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2018 2:26:39 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/4/2018 2:26:39 AM
Surr: 4-Bromofluorobenzene	130	70-130		%Rec	1	8/4/2018 2:26:39 AM
Surr: Toluene-d8	99.5	70-130		%Rec	1	8/4/2018 2:26:39 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/4/2018 2:26:39 AM
Surr: BFB	116	70-130		%Rec	1	8/4/2018 2:26:39 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS16

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:40:00 PM

Lab ID: 1808128-016

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	230	9.7		mg/Kg	1	8/6/2018 2:32:58 PM
Motor Oil Range Organics (MRO)	130	48		mg/Kg	1	8/6/2018 2:32:58 PM
Surr: DNOP	101	50.6-138		%Rec	1	8/6/2018 2:32:58 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	120	30		mg/Kg	20	8/7/2018 1:56:37 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/4/2018 2:49:32 AM
Toluene	ND	0.050		mg/Kg	1	8/4/2018 2:49:32 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/4/2018 2:49:32 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/4/2018 2:49:32 AM
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	8/4/2018 2:49:32 AM
Surr: Toluene-d8	98.2	70-130		%Rec	1	8/4/2018 2:49:32 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	7.0	5.0		mg/Kg	1	8/4/2018 2:49:32 AM
Surr: BFB	119	70-130		%Rec	1	8/4/2018 2:49:32 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS17

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:45:00 PM

Lab ID: 1808128-017

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	51	9.7		mg/Kg	1	8/6/2018 4:57:01 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/6/2018 4:57:01 PM
Surr: DNOP	98.9	50.6-138		%Rec	1	8/6/2018 4:57:01 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	83	30		mg/Kg	20	8/7/2018 2:33:50 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.025		mg/Kg	1	8/4/2018 3:35:40 AM
Toluene	ND	0.049		mg/Kg	1	8/4/2018 3:35:40 AM
Ethylbenzene	ND	0.049		mg/Kg	1	8/4/2018 3:35:40 AM
Xylenes, Total	ND	0.098		mg/Kg	1	8/4/2018 3:35:40 AM
Surr: 4-Bromofluorobenzene	134	70-130	S	%Rec	1	8/4/2018 3:35:40 AM
Surr: Toluene-d8	96.3	70-130		%Rec	1	8/4/2018 3:35:40 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	8.0	4.9		mg/Kg	1	8/4/2018 3:35:40 AM
Surr: BFB	121	70-130		%Rec	1	8/4/2018 3:35:40 AM

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

Qualifiers:	* Value exceeds Maximum Contaminant Level.	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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS18

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:50:00 PM

Lab ID: 1808128-018

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	640	9.8		mg/Kg	1	8/6/2018 6:11:25 PM
Motor Oil Range Organics (MRO)	330	49		mg/Kg	1	8/6/2018 6:11:25 PM
Surr: DNOP	113	50.6-138		%Rec	1	8/6/2018 6:11:25 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	33	30		mg/Kg	20	8/7/2018 3:11:05 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/6/2018 6:27:51 PM
Toluene	ND	0.047		mg/Kg	1	8/6/2018 6:27:51 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2018 6:27:51 PM
Xylenes, Total	ND	0.093		mg/Kg	1	8/6/2018 6:27:51 PM
Surr: 4-Bromofluorobenzene	139	70-130	S	%Rec	1	8/6/2018 6:27:51 PM
Surr: Toluene-d8	98.6	70-130		%Rec	1	8/6/2018 6:27:51 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	24	4.7		mg/Kg	1	8/6/2018 6:27:51 PM
Surr: BFB	126	70-130		%Rec	1	8/6/2018 6:27:51 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS19

Project: Heros 23 08 09L

Collection Date: 8/1/2018 12:55:00 PM

Lab ID: 1808128-019

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	170	9.8		mg/Kg	1	8/7/2018 1:00:42 PM
Motor Oil Range Organics (MRO)	100	49		mg/Kg	1	8/7/2018 1:00:42 PM
Surr: DNOP	88.8	50.6-138		%Rec	1	8/7/2018 1:00:42 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	250	30		mg/Kg	20	8/7/2018 3:23:30 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/6/2018 2:34:33 PM
Toluene	ND	0.047		mg/Kg	1	8/6/2018 2:34:33 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2018 2:34:33 PM
Xylenes, Total	ND	0.094		mg/Kg	1	8/6/2018 2:34:33 PM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	8/6/2018 2:34:33 PM
Surr: Toluene-d8	96.9	70-130		%Rec	1	8/6/2018 2:34:33 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2018 11:53:35 PM
Surr: BFB	115	70-130		%Rec	1	8/6/2018 11:53:35 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS20

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:00:00 PM

Lab ID: 1808128-020

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	65	9.9		mg/Kg	1	8/6/2018 7:25:57 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/6/2018 7:25:57 PM
Surr: DNOP	104	50.6-138		%Rec	1	8/6/2018 7:25:57 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	73	30		mg/Kg	20	8/7/2018 3:35:54 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/4/2018 5:53:57 AM
Toluene	ND	0.047		mg/Kg	1	8/4/2018 5:53:57 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/4/2018 5:53:57 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/4/2018 5:53:57 AM
Surr: 4-Bromofluorobenzene	127	70-130		%Rec	1	8/4/2018 5:53:57 AM
Surr: Toluene-d8	104	70-130		%Rec	1	8/4/2018 5:53:57 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/4/2018 5:53:57 AM
Surr: BFB	114	70-130		%Rec	1	8/4/2018 5:53:57 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS21

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:05:00 PM

Lab ID: 1808128-021

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	250	9.9		mg/Kg	1	8/7/2018 2:19:57 PM
Motor Oil Range Organics (MRO)	140	49		mg/Kg	1	8/7/2018 2:19:57 PM
Surr: DNOP	98.1	50.6-138		%Rec	1	8/7/2018 2:19:57 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	48	30		mg/Kg	20	8/7/2018 3:48:19 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/6/2018 2:57:50 PM
Toluene	ND	0.048		mg/Kg	1	8/6/2018 2:57:50 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/6/2018 2:57:50 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/6/2018 2:57:50 PM
Surr: 4-Bromofluorobenzene	141	70-130	S	%Rec	1	8/6/2018 2:57:50 PM
Surr: Toluene-d8	98.5	70-130		%Rec	1	8/6/2018 2:57:50 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	19	4.8		mg/Kg	1	8/6/2018 2:57:50 PM
Surr: BFB	127	70-130		%Rec	1	8/6/2018 2:57:50 PM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE Client Sample ID: SS22
 Project: Heros 23 08 09L Collection Date: 8/1/2018 1:10:00 PM
 Lab ID: 1808128-022 Matrix: SOIL Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	310	9.9		mg/Kg	1	8/6/2018 8:40:19 PM
Motor Oil Range Organics (MRO)	170	50		mg/Kg	1	8/6/2018 8:40:19 PM
Surr: DNOP	110	50.6-138		%Rec	1	8/6/2018 8:40:19 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	59	30		mg/Kg	20	8/7/2018 4:00:43 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/4/2018 6:17:05 AM
Toluene	ND	0.048		mg/Kg	1	8/4/2018 6:17:05 AM
Ethylbenzene	ND	0.048		mg/Kg	1	8/4/2018 6:17:05 AM
Xylenes, Total	ND	0.097		mg/Kg	1	8/4/2018 6:17:05 AM
Surr: 4-Bromofluorobenzene	140	70-130	S	%Rec	1	8/4/2018 6:17:05 AM
Surr: Toluene-d8	92.6	70-130		%Rec	1	8/4/2018 6:17:05 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	8.7	4.8		mg/Kg	1	8/4/2018 6:17:05 AM
Surr: BFB	127	70-130		%Rec	1	8/4/2018 6:17:05 AM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS23

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:15:00 PM

Lab ID: 1808128-023

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	96	9.9		mg/Kg	1	8/6/2018 9:54:34 PM
Motor Oil Range Organics (MRO)	57	50		mg/Kg	1	8/6/2018 9:54:34 PM
Surr: DNOP	100	50.6-138		%Rec	1	8/6/2018 9:54:34 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	37	30		mg/Kg	20	8/7/2018 4:13:08 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/4/2018 6:40:07 AM
Toluene	ND	0.046		mg/Kg	1	8/4/2018 6:40:07 AM
Ethylbenzene	ND	0.046		mg/Kg	1	8/4/2018 6:40:07 AM
Xylenes, Total	ND	0.093		mg/Kg	1	8/4/2018 6:40:07 AM
Surr: 4-Bromofluorobenzene	132	70-130	S	%Rec	1	8/4/2018 6:40:07 AM
Surr: Toluene-d8	97.3	70-130		%Rec	1	8/4/2018 6:40:07 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/4/2018 6:40:07 AM
Surr: BFB	118	70-130		%Rec	1	8/4/2018 6:40:07 AM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS24

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:20:00 PM

Lab ID: 1808128-024

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	39	10		mg/Kg	1	8/6/2018 11:08:21 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/6/2018 11:08:21 PM
Surr: DNOP	100	50.6-138		%Rec	1	8/6/2018 11:08:21 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	320	30		mg/Kg	20	8/7/2018 6:29:37 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/4/2018 7:03:10 AM
Toluene	ND	0.047		mg/Kg	1	8/4/2018 7:03:10 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/4/2018 7:03:10 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/4/2018 7:03:10 AM
Surr: 4-Bromofluorobenzene	133	70-130	S	%Rec	1	8/4/2018 7:03:10 AM
Surr: Toluene-d8	98.6	70-130		%Rec	1	8/4/2018 7:03:10 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/4/2018 7:03:10 AM
Surr: BFB	118	70-130		%Rec	1	8/4/2018 7:03:10 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS25

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:25:00 PM

Lab ID: 1808128-025

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/7/2018 3:09:18 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/7/2018 3:09:18 PM
Surr: DNOP	89.4	50.6-138		%Rec	1	8/7/2018 3:09:18 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	31	30		mg/Kg	20	8/7/2018 6:42:02 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.024		mg/Kg	1	8/6/2018 3:21:08 PM
Toluene	ND	0.047		mg/Kg	1	8/6/2018 3:21:08 PM
Ethylbenzene	ND	0.047		mg/Kg	1	8/6/2018 3:21:08 PM
Xylenes, Total	ND	0.095		mg/Kg	1	8/6/2018 3:21:08 PM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	8/6/2018 3:21:08 PM
Surr: Toluene-d8	103	70-130		%Rec	1	8/6/2018 3:21:08 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/6/2018 3:21:08 PM
Surr: BFB	108	70-130		%Rec	1	8/6/2018 3:21:08 PM

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 limit
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS26

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:30:00 PM

Lab ID: 1808128-026

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	120	9.7		mg/Kg	1	8/7/2018 12:22:40 AM
Motor Oil Range Organics (MRO)	70	49		mg/Kg	1	8/7/2018 12:22:40 AM
Surr: DNOP	97.2	50.6-138		%Rec	1	8/7/2018 12:22:40 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	260	30		mg/Kg	20	8/7/2018 6:54:26 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/4/2018 7:26:12 AM
Toluene	ND	0.047		mg/Kg	1	8/4/2018 7:26:12 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/4/2018 7:26:12 AM
Xylenes, Total	ND	0.094		mg/Kg	1	8/4/2018 7:26:12 AM
Surr: 4-Bromofluorobenzene	129	70-130		%Rec	1	8/4/2018 7:26:12 AM
Surr: Toluene-d8	97.1	70-130		%Rec	1	8/4/2018 7:26:12 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/4/2018 7:26:12 AM
Surr: BFB	114	70-130		%Rec	1	8/4/2018 7:26:12 AM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS27

Project: Heros 23 08 09L

Collection Date: 8/1/2018 1:35:00 PM

Lab ID: 1808128-027

Matrix: SOIL

Received Date: 8/2/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/7/2018 1:36:38 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/7/2018 1:36:38 AM
Surr: DNOP	99.5	50.6-138		%Rec	1	8/7/2018 1:36:38 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	30		mg/Kg	20	8/7/2018 7:06:51 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: AG
Benzene	ND	0.023		mg/Kg	1	8/4/2018 7:49:18 AM
Toluene	ND	0.047		mg/Kg	1	8/4/2018 7:49:18 AM
Ethylbenzene	ND	0.047		mg/Kg	1	8/4/2018 7:49:18 AM
Xylenes, Total	ND	0.093		mg/Kg	1	8/4/2018 7:49:18 AM
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	8/4/2018 7:49:18 AM
Surr: Toluene-d8	96.9	70-130		%Rec	1	8/4/2018 7:49:18 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/4/2018 7:49:18 AM
Surr: BFB	112	70-130		%Rec	1	8/4/2018 7:49:18 AM

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	MB-39600	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	39600	RunNo:	53230					
Prep Date:	8/6/2018	Analysis Date:	8/6/2018	SeqNo:	1753102	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-39600	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	39600	RunNo:	53230					
Prep Date:	8/6/2018	Analysis Date:	8/6/2018	SeqNo:	1753103	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

Sample ID	MB-39629	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	39629	RunNo:	53285					
Prep Date:	8/7/2018	Analysis Date:	8/7/2018	SeqNo:	1754250	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-39629	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	39629	RunNo:	53285					
Prep Date:	8/7/2018	Analysis Date:	8/7/2018	SeqNo:	1754251	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.9	90	110			

Sample ID	MB-39649	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	39649	RunNo:	53285					
Prep Date:	8/7/2018	Analysis Date:	8/7/2018	SeqNo:	1754280	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-39649	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	39649	RunNo:	53285					
Prep Date:	8/7/2018	Analysis Date:	8/7/2018	SeqNo:	1754281	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- 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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	MB-39571	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	39571	RunNo:	53193					
Prep Date:	8/2/2018	Analysis Date:	8/3/2018	SeqNo:	1750580	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	8.6		10.00		86.3	50.6	138			

Sample ID	LCS-39571	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	39571	RunNo:	53193					
Prep Date:	8/2/2018	Analysis Date:	8/3/2018	SeqNo:	1750710	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	4.2		5.000		83.7	50.6	138			

Sample ID	MB-39582	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	39582	RunNo:	53228					
Prep Date:	8/3/2018	Analysis Date:	8/6/2018	SeqNo:	1751772	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	8.2		10.00		82.0	50.6	138			

Sample ID	LCS-39582	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	39582	RunNo:	53228					
Prep Date:	8/3/2018	Analysis Date:	8/6/2018	SeqNo:	1751774	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	48	10	50.00	0	95.3	70	130			
Surr: DNOP	4.1		5.000		81.4	50.6	138			

Sample ID	1808128-016AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SS16	Batch ID:	39582	RunNo:	53228					
Prep Date:	8/3/2018	Analysis Date:	8/6/2018	SeqNo:	1751832	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	270	9.6	48.12	225.8	85.9	53.5	126			
Surr: DNOP	5.1		4.812		107	50.6	138			

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 Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID: 1808128-016AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: SS16	Batch ID: 39582	RunNo: 53228								
Prep Date: 8/3/2018	Analysis Date: 8/6/2018	SeqNo: 1751835	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	330	9.7	48.31	225.8	225	53.5	126	22.4	21.7	RS
Surr: DNOP	5.2		4.831		107	50.6	138	0	0	

Sample ID: MB-39604	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 39604	RunNo: 53261								
Prep Date: 8/6/2018	Analysis Date: 8/7/2018	SeqNo: 1753037	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	8.7		10.00		87.2	50.6	138			

Sample ID: LCS-39604	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 39604	RunNo: 53261								
Prep Date: 8/6/2018	Analysis Date: 8/7/2018	SeqNo: 1753038	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.6	70	130			
Surr: DNOP	4.2		5.000		84.0	50.6	138			

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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	lcs-39572		SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	BatchQC		Batch ID: 39572	RunNo: 53199						
Prep Date:	8/2/2018		Analysis Date: 8/3/2018	SeqNo: 1750609	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	80	120			
Toluene	0.94	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.56		0.5000		111	70	130			
Surr: Toluene-d8	0.49		0.5000		98.1	70	130			

Sample ID	mb-39572		SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	PBS		Batch ID: 39572	RunNo: 53199						
Prep Date:	8/2/2018		Analysis Date: 8/3/2018	SeqNo: 1750610	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	0.62		0.5000		124	70	130			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

Sample ID	1808128-017ams		SampType: MS4	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	SS17		Batch ID: 39572	RunNo: 53199						
Prep Date:	8/2/2018		Analysis Date: 8/4/2018	SeqNo: 1751121	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.023	0.9183	0	95.2	80	120			
Toluene	0.98	0.046	0.9183	0.005815	106	80	120			
Ethylbenzene	1.1	0.046	0.9183	0.009136	115	82	121			
Xylenes, Total	3.2	0.092	2.755	0	117	80.2	120			
Surr: 4-Bromofluorobenzene	0.57		0.4591		125	70	130			
Surr: Toluene-d8	0.44		0.4591		95.4	70	130			

Sample ID	1808128-017amsd		SampType: MSD4	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	SS17		Batch ID: 39572	RunNo: 53199						
Prep Date:	8/2/2018		Analysis Date: 8/4/2018	SeqNo: 1751122	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	0.9901	0	101	80	120	13.6	20	
Toluene	1.1	0.050	0.9901	0.005815	110	80	120	10.5	20	
Ethylbenzene	1.1	0.050	0.9901	0.009136	114	82	121	7.14	20	
Xylenes, Total	3.5	0.099	2.970	0	117	80.2	120	7.44	20	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	1808128-017amsd	SampType:	MSD4	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	SS17	Batch ID:	39572	RunNo:	53199					
Prep Date:	8/2/2018	Analysis Date:	8/4/2018	SeqNo:	1751122	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.61		0.4950		123	70	130	0	0	
Surr: Toluene-d8	0.49		0.4950		98.2	70	130	0	0	

Sample ID	Ics-39567	SampType:	LCS4	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	39567	RunNo:	53199					
Prep Date:	8/2/2018	Analysis Date:	8/3/2018	SeqNo:	1751160	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.9	80	120			
Toluene	0.94	0.050	1.000	0	94.2	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.48		0.5000		95.4	70	130			

Sample ID	mb-39567	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	39567	RunNo:	53199					
Prep Date:	8/2/2018	Analysis Date:	8/3/2018	SeqNo:	1751161	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	0.64		0.5000		128	70	130			
Surr: Toluene-d8	0.50		0.5000		99.1	70	130			

Sample ID	Ics-39589	SampType:	LCS4	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	39589	RunNo:	53243					
Prep Date:	8/3/2018	Analysis Date:	8/6/2018	SeqNo:	1752198	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	80	120			
Toluene	0.95	0.050	1.000	0	95.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.56		0.5000		111	70	130			
Surr: Toluene-d8	0.45		0.5000		89.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	mb-39589	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	39589	RunNo:	53243					
Prep Date:	8/3/2018	Analysis Date:	8/6/2018	SeqNo:	1752199	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	0.63		0.5000		125	70	130			
Surr: Toluene-d8	0.47		0.5000		94.3	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	Ics-39572		SampType:	LCS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	LCSS		Batch ID:	39572		RunNo:	53199				
Prep Date:	8/2/2018		Analysis Date:	8/3/2018		SeqNo:	1750597		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	70	130				
Surr: BFB	530		500.0		106	70	130				

Sample ID	mb-39572		SampType:	MBLK		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	PBS		Batch ID:	39572		RunNo:	53199				
Prep Date:	8/2/2018		Analysis Date:	8/3/2018		SeqNo:	1750598		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	550		500.0		110	70	130				

Sample ID	Ics-39567		SampType:	LCS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	LCSS		Batch ID:	39567		RunNo:	53199				
Prep Date:	8/2/2018		Analysis Date:	8/3/2018		SeqNo:	1751079		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.6	70	130				
Surr: BFB	510		500.0		102	70	130				

Sample ID	mb-39567		SampType:	MBLK		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	PBS		Batch ID:	39567		RunNo:	53199				
Prep Date:	8/2/2018		Analysis Date:	8/3/2018		SeqNo:	1751080		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	570		500.0		114	70	130				

Sample ID	1808128-018ams		SampType:	MS		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	SS18		Batch ID:	39572		RunNo:	53243				
Prep Date:	8/2/2018		Analysis Date:	8/6/2018		SeqNo:	1752041		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	86	4.8	24.02	24.29	258	64.7	142			S	
Surr: BFB	630		480.3		131	70	130			S	

Sample ID	1808128-018amsd		SampType:	MSD		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	SS18		Batch ID:	39572		RunNo:	53243				
Prep Date:	8/2/2018		Analysis Date:	8/6/2018		SeqNo:	1752042		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1808128

14-Aug-18

Client: LTE
Project: Heros 23 08 09L

Sample ID: 1808128-018amsd	SampType: MSD	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: SS18	Batch ID: 39572	RunNo: 53243								
Prep Date: 8/2/2018	Analysis Date: 8/6/2018	SeqNo: 1752042	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	61	4.7	23.41	24.29	157	64.7	142	34.2	20	RS
Surr: BFB	580		468.2		124	70	130	0	0	

Sample ID: lcs-39589	SampType: LCS	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: LCSS	Batch ID: 39589	RunNo: 53243								
Prep Date: 8/3/2018	Analysis Date: 8/6/2018	SeqNo: 1752062	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	110	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID: mb-39589	SampType: MBLK	TestCode: EPA Method 8015D Mod: Gasoline Range								
Client ID: PBS	Batch ID: 39589	RunNo: 53243								
Prep Date: 8/3/2018	Analysis Date: 8/6/2018	SeqNo: 1752063	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	560		500.0		112	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 Detection Limit
- W Sample container temperature is out of limit as specified



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: 1808128

RcptNo: 1

Received By: Anne Thorne 8/2/2018 7:00:00 AM
 Completed By: Anne Thorne 8/2/2018 12:14:34 PM
 Reviewed By: ENM 8/2/18

Anne Thorne
Anne Thorne

Lab: JAB 08/02/18

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? Yes No
 (Note discrepancies on chain of custody)
 12. Are matrices correctly identified on Chain of Custody? Yes No
 13. Is it clear what analyses were requested? Yes No
 14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? _____
 Checked by: JAB 08/02/18

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	1.1	Good	Yes			
2	1.1	Good	Yes			

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 845 E 2nd Ave

Orange CO 81301

Phone #: 970-385-1096

email or Fax#: dhenemann@ltenv.com

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation
 NELAP Other _____

EDD (Type) PDF

Turn-Around Time:
 Standard Rush

Project Name: Heros 23 0809L

Project #: 076218010

Project Manager: Devin Henemann

Sampler: Danny Burns

On Ice: Yes No

Sample Temperature: 2.1-15.1-1.1

HEAL No. 1808128

2 coolers



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 Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 3000	Air Bubbles (Y or N)
8-1-18	1125	Soil	SS01	1x4oz	Cool	1808128	X	X										X	
	1130		SS02				X	X										X	
	1135		SS03				X	X										X	
	1140		SS04				X	X										X	
	1145		SS05				X	X										X	
	1150		SS06				X	X										X	
	1155		SS07				X	X										X	
	1200		SS08				X	X										X	
	1205		SS09				X	X										X	
	1210		SS10				X	X										X	
	1215		SS11				X	X										X	
	1220		SS12				X	X										X	

Date: 8/1/18 Time: 1612 Relinquished by: [Signature]

Received by: [Signature] Date: 8/1/18 Time: 1612

Date: 8/1/18 Time: 1817 Relinquished by: [Signature]

Received by: [Signature] Date: 08/02/18 Time: 0700

Remarks: cc: dburns@ltenv.com
Page 1 of 3

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.

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 848 E 2nd Ave
Durango, CO 81301

Phone #:

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation
 NELAP Other _____

EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: Heros 2308 OPL

Project #:

Project Manager: Devin Hennemann

Sampler: Dann Burns

On Ice: Yes No

Sample Temperature: 2.1 C (35.8 F)
2 coolers



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 Request ID	Container Type and #	Preservative Type	HEAL No	BTEX (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride 500.0	Air Bubbles (Y or N)
8-1-18	1225	Soil	SS13	1x402	COOL	213	X	X										X	
	1230		SS14			214	X	X										X	
	1235		SS15			215	X	X										X	
	1240		SS16			216	X	X										X	
	1245		SS17			217	X	X										X	
	1250		SS18			218	X	X										X	
	1255		SS19			219	X	X										X	
	1300		SS20			220	X	X										X	
	1305		SS21			221	X	X										X	
	1310		SS22			222	X	X										X	
	1315		SS23			223	X	X										X	
	1320		SS24			224	X	X										X	

Date: 8/1/18 Time: 1612 Relinquished by: [Signature] Received by: [Signature] Date: 8/1/18 Time: 1612

Date: 8/1/18 Time: 1817 Relinquished by: [Signature] Received by: [Signature] Date: 8/1/18 Time: 0700

Remarks: cc: dburns@ltenv.com
Page 2 of 3

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.

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 848 E 2nd Ave
Durango, CO 81301

Phone #: 970 385 1096

email or Fax#:

QA/QC Package:
 Standard Level 4 (Full Validation)

Accreditation
 NELAP Other _____
 EDD (Type) _____

Turn-Around Time:
 Standard Rush

Project Name: Heros 23 08 09L

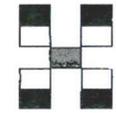
Project #:

Project Manager: Derin Hencmann

Sampler: Danny Burns

On Ice: Yes No

Sample Temperature: 2. 1-CF-10=1.1
Z code ->



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 Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MIRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride	Air Bubbles (Y or N)
8-1-18	1325	Soil	SS25	1-4oz	cool	025	X	X	X									X	
↓	1330	↓	SS26	↓	↓	026	X	X	X									X	
↓	1335	↓	SS27	↓	↓	027	X	X	X									X	
[Large handwritten scribble]																			

Date: <u>8/1/18</u>	Time: <u>1613</u>	Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Date: <u>8/1/18</u>	Time: <u>1613</u>	Remarks: <u>cc: dburns@ltenv.com</u> <u>Page 3 of 3</u>
Date: <u>8/1/18</u>	Time: <u>1817</u>	Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Date: <u>09/02/18</u>	Time: <u>0700</u>	

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



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

September 26, 2018

Devin Hencmann

LTE

848 East 2nd Avenue

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: Heros 23 08 09L

OrderNo.: 1809896

Dear Devin Hencmann:

Hall Environmental Analysis Laboratory received 13 sample(s) on 9/14/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 26, 2018.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS7A @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 10:00:00 AM

Lab ID: 1809896-001

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 7:45:26 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/18/2018 5:42:45 PM	40389
Surr: BFB	103	70-130		%Rec	1	9/18/2018 5:42:45 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	120	9.9		mg/Kg	1	9/19/2018 1:21:52 PM	40408
Motor Oil Range Organics (MRO)	84	49		mg/Kg	1	9/19/2018 1:21:52 PM	40408
Surr: DNOP	124	50.6-138		%Rec	1	9/19/2018 1:21:52 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.023		mg/Kg	1	9/18/2018 5:42:45 PM	40389
Toluene	ND	0.046		mg/Kg	1	9/18/2018 5:42:45 PM	40389
Ethylbenzene	ND	0.046		mg/Kg	1	9/18/2018 5:42:45 PM	40389
Xylenes, Total	ND	0.093		mg/Kg	1	9/18/2018 5:42:45 PM	40389
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	9/18/2018 5:42:45 PM	40389
Surr: Toluene-d8	95.8	70-130		%Rec	1	9/18/2018 5:42:45 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS7A @ 3'

Project: Heros 23 08 09L

Collection Date: 9/12/2018 10:15:00 AM

Lab ID: 1809896-002

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 8:22:41 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/18/2018 6:05:56 PM	40389
Surr: BFB	93.4	70-130		%Rec	1	9/18/2018 6:05:56 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2018 2:33:59 PM	40408
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2018 2:33:59 PM	40408
Surr: DNOP	121	50.6-138		%Rec	1	9/19/2018 2:33:59 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	9/18/2018 6:05:56 PM	40389
Toluene	ND	0.047		mg/Kg	1	9/18/2018 6:05:56 PM	40389
Ethylbenzene	ND	0.047		mg/Kg	1	9/18/2018 6:05:56 PM	40389
Xylenes, Total	ND	0.095		mg/Kg	1	9/18/2018 6:05:56 PM	40389
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	9/18/2018 6:05:56 PM	40389
Surr: Toluene-d8	91.8	70-130		%Rec	1	9/18/2018 6:05:56 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS7D @ 2'

Project: Heros 23 08 09L

Collection Date: 9/12/2018 11:20:00 AM

Lab ID: 1809896-004

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 8:35:06 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/18/2018 6:29:14 PM	40389
Surr: BFB	99.3	70-130		%Rec	1	9/18/2018 6:29:14 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2018 2:56:05 PM	40408
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2018 2:56:05 PM	40408
Surr: DNOP	118	50.6-138		%Rec	1	9/19/2018 2:56:05 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.023		mg/Kg	1	9/18/2018 6:29:14 PM	40389
Toluene	ND	0.047		mg/Kg	1	9/18/2018 6:29:14 PM	40389
Ethylbenzene	ND	0.047		mg/Kg	1	9/18/2018 6:29:14 PM	40389
Xylenes, Total	ND	0.093		mg/Kg	1	9/18/2018 6:29:14 PM	40389
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	9/18/2018 6:29:14 PM	40389
Surr: Toluene-d8	92.7	70-130		%Rec	1	9/18/2018 6:29:14 PM	40389

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS7E @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 11:30:00 AM

Lab ID: 1809896-005

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	31	30		mg/Kg	20	9/22/2018 8:47:30 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/18/2018 6:52:32 PM	40389
Surr: BFB	107	70-130		%Rec	1	9/18/2018 6:52:32 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	44	10		mg/Kg	1	9/19/2018 3:18:32 PM	40408
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2018 3:18:32 PM	40408
Surr: DNOP	119	50.6-138		%Rec	1	9/19/2018 3:18:32 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.025		mg/Kg	1	9/18/2018 6:52:32 PM	40389
Toluene	ND	0.049		mg/Kg	1	9/18/2018 6:52:32 PM	40389
Ethylbenzene	ND	0.049		mg/Kg	1	9/18/2018 6:52:32 PM	40389
Xylenes, Total	ND	0.099		mg/Kg	1	9/18/2018 6:52:32 PM	40389
Surr: 4-Bromofluorobenzene	120	70-130		%Rec	1	9/18/2018 6:52:32 PM	40389
Surr: Toluene-d8	97.1	70-130		%Rec	1	9/18/2018 6:52:32 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS11B @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 11:45:00 AM

Lab ID: 1809896-006

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 8:59:55 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/18/2018 7:15:47 PM	40389
Surr: BFB	97.2	70-130		%Rec	1	9/18/2018 7:15:47 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2018 3:40:34 PM	40408
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2018 3:40:34 PM	40408
Surr: DNOP	107	50.6-138		%Rec	1	9/19/2018 3:40:34 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.025		mg/Kg	1	9/18/2018 7:15:47 PM	40389
Toluene	ND	0.050		mg/Kg	1	9/18/2018 7:15:47 PM	40389
Ethylbenzene	ND	0.050		mg/Kg	1	9/18/2018 7:15:47 PM	40389
Xylenes, Total	ND	0.10		mg/Kg	1	9/18/2018 7:15:47 PM	40389
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	9/18/2018 7:15:47 PM	40389
Surr: Toluene-d8	93.7	70-130		%Rec	1	9/18/2018 7:15:47 PM	40389

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS11B @ 2'

Project: Heros 23 08 09L

Collection Date: 9/12/2018 12:00:00 PM

Lab ID: 1809896-007

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 9:12:20 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/18/2018 7:38:58 PM	40389
Surr: BFB	98.6	70-130		%Rec	1	9/18/2018 7:38:58 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: lrm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/19/2018 4:28:16 PM	40408
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2018 4:28:16 PM	40408
Surr: DNOP	113	50.6-138		%Rec	1	9/19/2018 4:28:16 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	9/18/2018 7:38:58 PM	40389
Toluene	ND	0.048		mg/Kg	1	9/18/2018 7:38:58 PM	40389
Ethylbenzene	ND	0.048		mg/Kg	1	9/18/2018 7:38:58 PM	40389
Xylenes, Total	ND	0.095		mg/Kg	1	9/18/2018 7:38:58 PM	40389
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	9/18/2018 7:38:58 PM	40389
Surr: Toluene-d8	93.1	70-130		%Rec	1	9/18/2018 7:38:58 PM	40389

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS11C @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 12:15:00 PM

Lab ID: 1809896-008

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	9/22/2018 9:49:34 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/18/2018 8:02:10 PM	40389
Surr: BFB	109	70-130		%Rec	1	9/18/2018 8:02:10 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	170	9.9		mg/Kg	1	9/19/2018 4:50:23 PM	40408
Motor Oil Range Organics (MRO)	110	49		mg/Kg	1	9/19/2018 4:50:23 PM	40408
Surr: DNOP	122	50.6-138		%Rec	1	9/19/2018 4:50:23 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	9/18/2018 8:02:10 PM	40389
Toluene	ND	0.049		mg/Kg	1	9/18/2018 8:02:10 PM	40389
Ethylbenzene	ND	0.049		mg/Kg	1	9/18/2018 8:02:10 PM	40389
Xylenes, Total	ND	0.098		mg/Kg	1	9/18/2018 8:02:10 PM	40389
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	9/18/2018 8:02:10 PM	40389
Surr: Toluene-d8	94.2	70-130		%Rec	1	9/18/2018 8:02:10 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS13A @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 12:30:00 PM

Lab ID: 1809896-009

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	38	30		mg/Kg	20	9/22/2018 10:01:59 PM	40516
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/18/2018 9:57:29 PM	40389
Surr: BFB	105	70-130		%Rec	1	9/18/2018 9:57:29 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/19/2018 5:12:30 PM	40408
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2018 5:12:30 PM	40408
Surr: DNOP	120	50.6-138		%Rec	1	9/19/2018 5:12:30 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.025		mg/Kg	1	9/18/2018 9:57:29 PM	40389
Toluene	ND	0.049		mg/Kg	1	9/18/2018 9:57:29 PM	40389
Ethylbenzene	ND	0.049		mg/Kg	1	9/18/2018 9:57:29 PM	40389
Xylenes, Total	ND	0.098		mg/Kg	1	9/18/2018 9:57:29 PM	40389
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	9/18/2018 9:57:29 PM	40389
Surr: Toluene-d8	93.1	70-130		%Rec	1	9/18/2018 9:57:29 PM	40389

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS13A @ 3'

Project: Heros 23 08 09L

Collection Date: 9/12/2018 12:45:00 PM

Lab ID: 1809896-010

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	48	30		mg/Kg	20	9/23/2018 11:57:27 AM	40520
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/18/2018 10:20:40 PM	40389
Surr: BFB	104	70-130		%Rec	1	9/18/2018 10:20:40 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/19/2018 5:34:38 PM	40408
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2018 5:34:38 PM	40408
Surr: DNOP	127	50.6-138		%Rec	1	9/19/2018 5:34:38 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	9/18/2018 10:20:40 PM	40389
Toluene	ND	0.048		mg/Kg	1	9/18/2018 10:20:40 PM	40389
Ethylbenzene	ND	0.048		mg/Kg	1	9/18/2018 10:20:40 PM	40389
Xylenes, Total	ND	0.095		mg/Kg	1	9/18/2018 10:20:40 PM	40389
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	9/18/2018 10:20:40 PM	40389
Surr: Toluene-d8	95.5	70-130		%Rec	1	9/18/2018 10:20:40 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: LTE

Client Sample ID: SS13B @ 6"

Project: Heros 23 08 09L

Collection Date: 9/12/2018 1:00:00 PM

Lab ID: 1809896-011

Matrix: SOIL

Received Date: 9/14/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	64	30		mg/Kg	20	9/23/2018 12:09:51 PM	40520
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: AG
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/18/2018 10:43:43 PM	40389
Surr: BFB	102	70-130		%Rec	1	9/18/2018 10:43:43 PM	40389
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: lrm
Diesel Range Organics (DRO)	48	10		mg/Kg	1	9/19/2018 5:56:40 PM	40408
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/19/2018 5:56:40 PM	40408
Surr: DNOP	116	50.6-138		%Rec	1	9/19/2018 5:56:40 PM	40408
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: AG
Benzene	ND	0.024		mg/Kg	1	9/18/2018 10:43:43 PM	40389
Toluene	ND	0.049		mg/Kg	1	9/18/2018 10:43:43 PM	40389
Ethylbenzene	ND	0.049		mg/Kg	1	9/18/2018 10:43:43 PM	40389
Xylenes, Total	ND	0.098		mg/Kg	1	9/18/2018 10:43:43 PM	40389
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	9/18/2018 10:43:43 PM	40389
Surr: Toluene-d8	98.4	70-130		%Rec	1	9/18/2018 10:43:43 PM	40389

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 Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809896
27-Sep-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	MB-40516	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	40516	RunNo:	54353					
Prep Date:	9/21/2018	Analysis Date:	9/22/2018	SeqNo:	1799403	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-40516	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	40516	RunNo:	54353					
Prep Date:	9/21/2018	Analysis Date:	9/22/2018	SeqNo:	1799404	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Sample ID	MB-40520	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	40520	RunNo:	54364					
Prep Date:	9/22/2018	Analysis Date:	9/23/2018	SeqNo:	1800846	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-40520	SampType:	ics	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	40520	RunNo:	54364					
Prep Date:	9/22/2018	Analysis Date:	9/23/2018	SeqNo:	1800847	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

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 Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809896
27-Sep-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	LCS-40408	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	40408	RunNo:	54262					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795175	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	70	130			
Surr: DNOP	5.5		5.000		111	50.6	138			

Sample ID	MB-40408	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	40408	RunNo:	54262					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795176	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		110	50.6	138			

Sample ID	1809896-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SS7A @ 6"	Batch ID:	40408	RunNo:	54262					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795177	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	190	9.9	49.46	116.6	144	53.5	126			S
Surr: DNOP	5.4		4.946		110	50.6	138			

Sample ID	1809896-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	SS7A @ 6"	Batch ID:	40408	RunNo:	54262					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795178	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	160	9.9	49.41	116.6	81.9	53.5	126	17.8	21.7	
Surr: DNOP	5.7		4.941		115	50.6	138	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809896

27-Sep-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	ics-40389	SampType:	LCS4	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	BatchQC	Batch ID:	40389	RunNo:	54218					
Prep Date:	9/17/2018	Analysis Date:	9/18/2018	SeqNo:	1794307	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	80	120			
Toluene	0.95	0.050	1.000	0	94.9	80	120			
Ethylbenzene	0.99	0.050	1.000	0	98.7	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.1	70	130			
Surr: Toluene-d8	0.45		0.5000		89.1	70	130			

Sample ID	mb-40389	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	40389	RunNo:	54218					
Prep Date:	9/17/2018	Analysis Date:	9/18/2018	SeqNo:	1794308	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	0.55		0.5000		110	70	130			
Surr: Toluene-d8	0.48		0.5000		96.5	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809896

27-Sep-18

Client: LTE
Project: Heros 23 08 09L

Sample ID	ics-40389	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	40389	RunNo:	54218					
Prep Date:	9/17/2018	Analysis Date:	9/18/2018	SeqNo:	1794195	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.0	70	130			
Surr: BFB	450		500.0		89.3	70	130			

Sample ID	mb-40389	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	40389	RunNo:	54218					
Prep Date:	9/17/2018	Analysis Date:	9/18/2018	SeqNo:	1794196	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	490		500.0		98.0	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 Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

Sample Log-In Check List

Client Name: LTE

Work Order Number: 1809896

RcptNo: 1

Received By: Anne Thorne

9/14/2018 7:00:00 AM

Anne Thorne

Completed By: Michelle Garcia

9/14/2018 3:17:37 PM

Michelle Garcia

Reviewed By: ENM

9/17/18

Labeled by: JAB 09/17

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? Yes No
 (Note discrepancies on chain of custody)
 12. Are matrices correctly identified on Chain of Custody? Yes No
 13. Is it clear what analyses were requested? Yes No
 14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
 (<2 or >12 unless noted)
 Adjusted? JAB
 Checked by: _____

09/17/18

Special Handling (if applicable)

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

Person Notified: Devon Heremann Date: 09/17/18
 By Whom: Jazmin Buckhead Via: eMail Phone Fax In Person
 Regarding: Missing sample 003A and extra sample SS11006
 Client Instructions: Dispose of extra sample and missing sample is being delivered

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
2	1.2	Good	Yes			

Chain-of-Custody Record

Client: LT Environmental

Mailing Address: 848 E. 2nd Ave
Durango, CO 81301

Phone #: 970-385-1096

email or Fax#:

QA/QC Package:

Standard Level 4 (Full Validation)

Accreditation

NELAP Other _____

EDD (Type) PDF

Turn-Around Time:

Standard Rush

Project Name:

Heros 23 08 9L

Project #:

076218010

Project Manager:

Devin Hencmann

Sampler: Josh Adams

On Ice: Yes No

Sample Temperature: 2 codes 1, 2



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 Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	BTEX 8021 Hold	Chloride 300 Hold
9-12-18	1000	Soil	SS7A@6"	(1) 4oz	cool	001			X									X	X
	1015		SS7A@3'			002			X									X	X
	1115		SS7D@6"			003			X									X	X
	1120		SS7D@2'			004			X									X	X
	1130		SS7E@6"			005			X									X	X
	1145		SS11B@6"			006			X									X	X
	1200		SS11B@2'			007			X									X	X
	1215		SS11C@6"			008			X									X	X
	1230		SS13A@6"			009			X									X	X
	1245		SS13A@3'			010			X									X	X
	1300		SS13B@6"			011			X									X	X

Date: 9-13-18 Time: 0945 Relinquished by: [Signature]

Received by: [Signature] Date: 9/13/18 Time: 945

Remarks: Analyze all hold samples per Devin. 9/13/18
cc: dhencmann@ltenu.com
aager@ltenu.com

Date: 11/13/18 Time: 1918 Relinquished by: [Signature]

Received by: [Signature] Date: 11/14/18 Time: 0700

Hold BTEX & Chloride

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 marked.



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

September 25, 2018

Devin Hencmann

LTE

2243 Main Ave Suite 3

Durango, CO 81301

TEL: (970) 946-1093

FAX

RE: Heros 23 08 9L

OrderNo.: 1809995

Dear Devin Hencmann:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/18/2018 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1809995

Date Reported: 9/25/2018

CLIENT: LTE

Client Sample ID: SS 7D @ 6"

Project: Heros 23 08 9L

Collection Date: 9/12/2018 11:15:00 AM

Lab ID: 1809995-001

Matrix: SOIL

Received Date: 9/18/2018 6:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: Irm
Diesel Range Organics (DRO)	20	9.8		mg/Kg	1	9/19/2018 3:17:10 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/19/2018 3:17:10 PM
Surr: DNOP	93.8	50.6-138		%Rec	1	9/19/2018 3:17:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/19/2018 10:45:00 AM
Surr: BFB	97.3	15-316		%Rec	1	9/19/2018 10:45:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/19/2018 10:45:00 AM
Toluene	ND	0.049		mg/Kg	1	9/19/2018 10:45:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	9/19/2018 10:45:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	9/19/2018 10:45:00 AM
Surr: 4-Bromofluorobenzene	98.6	80-120		%Rec	1	9/19/2018 10:45:00 AM
EPA METHOD 300.0: ANIONS						Analyst: smb
Chloride	150	30		mg/Kg	20	9/23/2018 4:42:49 PM

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 Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809995

25-Sep-18

Client: LTE
Project: Heros 23 08 9L

Sample ID	MB-40520	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	40520	RunNo:	54364					
Prep Date:	9/22/2018	Analysis Date:	9/23/2018	SeqNo:	1800846	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-40520	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	40520	RunNo:	54364					
Prep Date:	9/22/2018	Analysis Date:	9/23/2018	SeqNo:	1800847	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

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 Detection Limit |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809995

25-Sep-18

Client: LTE
Project: Heros 23 08 9L

Sample ID: LCS-40424	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 40424	RunNo: 54250								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795059	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	92.3	70	130			
Surr: DNOP	3.6		5.000		71.2	50.6	138			

Sample ID: MB-40424	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 40424	RunNo: 54250								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795060	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	8.5		10.00		85.1	50.6	138			

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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809995

25-Sep-18

Client: LTE
Project: Heros 23 08 9L

Sample ID MB-40423	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 40423	RunNo: 54264								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795309	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	960		1000		96.3	15	316			

Sample ID LCS-40423	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 40423	RunNo: 54264								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795310	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	75.9	131			
Surr: BFB	1100		1000		109	15	316			

Sample ID 1809995-001AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SS 7D @ 6"	Batch ID: 40423	RunNo: 54264								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795314	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO)	30	4.7	23.56	0	127	77.8	128			
Surr: BFB	1100		942.5		113	15	316			

Sample ID 1809995-001AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SS 7D @ 6"	Batch ID: 40423	RunNo: 54264								
Prep Date: 9/18/2018	Analysis Date: 9/19/2018	SeqNo: 1795315	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Gasoline Range Organics (GRO)	30	4.6	23.06	0	129	77.8	128	0.237	20	S
Surr: BFB	1000		922.5		114	15	316	0	0	

Sample ID MB-40453	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 40453	RunNo: 54282								
Prep Date: 9/19/2018	Analysis Date: 9/20/2018	SeqNo: 1796709	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: BFB	910		1000		91.4	15	316			
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Sample ID LCS-40453	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 40453	RunNo: 54282								
Prep Date: 9/19/2018	Analysis Date: 9/20/2018	SeqNo: 1796710	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: BFB	1100		1000		107	15	316			
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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 Detection Limit
- S % Recovery outside of range due to dilution or matrix
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1809995
25-Sep-18

Client: LTE
Project: Heros 23 08 9L

Sample ID	MB-40423	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	40423	RunNo:	54264					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795348	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	0.98		1.000		98.2	80	120			

Sample ID	LCS-40423	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	40423	RunNo:	54264					
Prep Date:	9/18/2018	Analysis Date:	9/19/2018	SeqNo:	1795349	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Benzene	0.93	0.025	1.000	0	92.7	77.3	128			
Toluene	0.97	0.050	1.000	0	97.1	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	96.1	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	96.6	81.6	129			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.6	80	120			

Sample ID	MB-40453	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	40453	RunNo:	54282					
Prep Date:	9/19/2018	Analysis Date:	9/20/2018	SeqNo:	1796749	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	0.92		1.000		91.5	80	120			
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Sample ID	LCS-40453	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	40453	RunNo:	54282					
Prep Date:	9/19/2018	Analysis Date:	9/20/2018	SeqNo:	1796750	Units:	%Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			
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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 Detection Limit
- W Sample container temperature is out of limit as specified



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: 1809995

RcptNo: 1

Received By: Anne Thorne 9/18/2018 6:55:00 AM

Anne Thorne

Completed By: Anne Thorne 9/18/2018 9:03:15 AM

Anne Thorne

Reviewed By: *AT* 9/18/18

Labeled by: AT 09/18/18

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? Yes No
 (Note discrepancies on chain of custody)
 12. Are matrices correctly identified on Chain of Custody? Yes No
 13. Is it clear what analyses were requested? Yes No
 14. Were all holding times able to be met? Yes No
 (If no, notify customer for authorization.)

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

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

16. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

