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	NVF1900731813
District RP	13665
Facility ID	
Application ID	

# **Release Notification**

PCS 191 7529119

DISTRICT III

#### **Responsible Party**

Responsible Party	Harvest Four Corners, LLC	OGRID 37388
Contact Name	Kijun Hong	Contact Telephone (505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # (assigned by OCD) NVF1900731813
Contact mailing address	1755 Arroyo Dr., Farmington, NM	87413

### **Location of Release Source**

Latitude	3	36.643012	(NAD 83 in dec	Longitude107	7.354571
Site Name	Trunk L			Site Type Compressor St	ation
Date Release	Discovered	12/14/2018		API# (if applicable)	
Unit Letter	Section	Township	Range	County	
Р	28	28N	5W	Rio Arriba	NMOCD
Surface Owne	r: 🗌 State	Federal Tri	bal 🛛 Private (A	lame:	MAY 3 9 2019

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Recovered (bbls) Volume Released (bbls) Volume Recovered (bbls) Produced Water Volume Released (bbls) Is the concentration of dissolved chloride in the Yes No produced water >10,000 mg/l? Condensate Volume Recovered (bbls) 22 Volume Released (bbls) 22 BBLs into lined secondary containment. Natural Gas Volume Recovered (Mcf) Volume Released (Mcf) Volume/Weight Recovered (provide units) Other (describe) Volume/Weight Released (provide units)

Cause of Release

Excessive liquids receive by station during a pig run. Also, higher initial level in slug catcher due to stuck float valve.

All free liquids have been recovered by vac truck from the lined secondary containment.

### Smith, Cory, EMNRD

From:Smith, Cory, EMNRDSent:Friday, June 21, 2019 10:54 AMTo:'Kijun Hong'Subject:RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Kijun,

OCD has reviewed the remediation plan for the Trunk L received on May 31, 2019 and have approved the plan with the following conditions of approval:

- Harvest will achieve a run time of 90% or better of the proposed 10 hours in winter and 12 hours in summer per quarter.
- Harvest will collect the proposed air samples prior to the inlet of the vacuum pump but, after the convergence of all SVE wells or alternativity an air sample from each SVE well is acceptable.
  - The gas sample will be analyzed for EPA Method 8260 Full List and include Carbon Dioxide and Oxygen.
- Harvest will collect an initial gas sample for laboratory analysis shortly after startup of SVE operations after the initial gas sample an annual sample as described in the remediation plan is acceptable.
- Harvest quarterly report will include at a minimum
  - Summary of remediation activity for the quarter
  - o SVE Run time
  - o SVE mass removal
  - Field notes (VOC readings, water/product recovery, inspection dates etc)
  - Amount of liquids/product recovered if any (This will be recorded from the knock out drum since ground water in not expected to be encountered)

OCD recommends the installation of an additional "Vent" well with fans or even active air sparging well to increase oxygen levels which would promote biodegradation and assist in air movement for sve remediation.

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

From: Smith, Cory, EMNRD Sent: Monday, May 6, 2019 10:15 AM To: 'Kijun Hong' <khong@harvestmidstream.com> Subject: RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Kijun,

Yes an SVE system is an OCD acceptable insitu remediation technique.

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

From: Kijun Hong <<u>khong@harvestmidstream.com</u>> Sent: Monday, May 6, 2019 10:04 AM To: Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>> Subject: [EXT] RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Hey Cory, Would you be open to installing an SVE system to remediate?

This would allow us to keep tanks in service.

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]

Sent: Thursday, May 02, 2019 2:09 PM

To: Kijun Hong <<u>khong@harvestmidstream.com</u>>

Cc: <u>bherb@ltenv.com</u>; Joseph Pruitt <<u>jpruitt@harvestmidstream.com</u>>; Lloyd Bell <<u>lbell@harvestmidstream.com</u>>; <u>tjones@harvestmidstream.com</u>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>> Subject: RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Kijun,

The reasons for the denied deferral request is as follows.

- With ground water possible at 78' and depth of contamination between Surface and ~39' the possible distance to interfacing with ground water is only 40' which could cause a risk to ground water.
- OCD determination of causing a major facility deconstruction is for sites typically that have permanent foundations/features. Examples of this would be Tank battery's located in concrete containment barriers, Pipeline/electrical lines located in facilities that have concrete/I-beam supports, buildings with permanent foundations etc. Facility/System shutdowns are not considered major facility deconstruction.
- Natural degradation is not an approved OCD remediation method.

As mentioned on the phone with Mr. Jones if Harvest disagrees with the Divisions determination of the remediation plan Harvest may request a hearing per 19.15.29.12 C(5) NMAC

If you have any additional questions I can be contacted and the number below.

Cory Smith Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115

#### cory.smith@state.nm.us

From: Kijun Hong <<u>khong@harvestmidstream.com</u>>

Sent: Thursday, May 2, 2019 10:52 AM

To: Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>> Cc: <u>bherb@ltenv.com</u>; Joseph Pruitt <<u>jpruitt@harvestmidstream.com</u>>; Lloyd Bell <<u>lbell@harvestmidstream.com</u>> Subject: [EXT] RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Cory,

Could you please provide more explanation on the reasoning for denial?

We are planning on repairing the liner next week. Also, given the new depth to ground water data, we are still fully delineated and there is no change in the closure criteria for GRO+DRO. The only closure standards we exceed are for GRO+DRO directly under the tank (BH1 and BH7). These samples came in at 1,230 mg/kg and 1,310 mg/kg respectively against the closure standard of 1,000mg/kg.

Breaking down NMOCD's regulations, Harvest has met all conditions for deferral:

- "If contamination is located in areas immediately under or around production equipment such as production tanks"
- "where remediation could cause a major facility deconstruction"
- "so long as the contamination is fully delineated"
- "and does not cause an imminent risk to human health, the environment, or ground water."

Respectfully, Kijun

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Thursday, May 02, 2019 9:53 AM
To: Kijun Hong <<u>khong@harvestmidstream.com</u>>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>>
Cc: <u>bherb@ltenv.com</u>; Joseph Pruitt <<u>ipruitt@harvestmidstream.com</u>>; Lloyd Bell <<u>lbell@harvestmidstream.com</u>>
Subject: RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Kijun,

The current liner integrity has already been compromised. Ground water is estimated to be at 78' based on a cathodic well report located on the HEC San Juan 28-5 #48 (30-039-07361).

The OCD has denied the deferral request and additional remediation will be required.

Cory Smith Environmental Specialist Oil Conservation Division Energy, Minerals, & Natural Resources 1000 Rio Brazos, Aztec, NM 87410 (505)334-6178 ext 115 cory.smith@state.nm.us From: Kijun Hong <<u>khong@harvestmidstream.com</u>>

Sent: Wednesday, May 1, 2019 11:27 AM

To: Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>> Cc: <u>bherb@ltenv.com</u>; Joseph Pruitt <<u>jpruitt@harvestmidstream.com</u>>; Lloyd Bell <<u>lbell@harvestmidstream.com</u>> Subject: [EXT] RE: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Cory,

Harvest is proposing to leave the impacted soil in place for several reasons:

- 1. There are currently 4 aboveground storage tanks and one below grade storage tank that would have to be removed from service in order to dig out impacted soil or install a remediation system. These tanks are associated with the Trunk L facility and their removal would cause major facility deconstruction.
- 2. The containment is lined and in situ remediation would affect the existing liner.
- 3. Deferring remediation does not cause an imminent risk to human health, the environment, or groundwater.
  - a. Groundwater is estimated to be deep and unlikely to be affected by the impacted soil.
  - b. Concentrations of DRO/GRO only exceed the NMOCD closure criteria by 310 mg/kg in one sample and are fully delineated laterally and vertically.
  - c. No impacts were observed outside the extent of the containment. A new liner will act as a cap over the impacted soil which will cover surface impact and the possibility of impact to surface water.
  - d. The liner will help prevent migration of the impacts vertically within the subsurface.

In response to your questions, the insitu remediation proposed is natural degradation with a low potential for migration based on the above assessment.

Harvest estimates that these tanks will be in place for approximately 30 years.

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Friday, April 26, 2019 1:06 PM
To: Kijun Hong <<u>khong@harvestmidstream.com</u>>
Cc: <u>bherb@ltenv.com</u>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>>
Subject: [EXTERNAL] RE: Harvest Midstream - Trunk L - Update

Kijun,

Looking at the deferral request, How come Harvest did not investigate any insitu remediation options? I did not see a provided reason why the equipment can be moved and or temporary tanks cant be set?

What is the time line for the station to be abandoned if the deferral is granted? ?

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

From: Fields, Vanessa, EMNRD <<u>Vanessa.Fields@state.nm.us</u>> Sent: Tuesday, March 12, 2019 2:49 PM To: Kijun Hong <<u>khong@harvestmidstream.com</u>> Cc: <u>bherb@ltenv.com</u>; Powell, Brandon, EMNRD <<u>Brandon.Powell@state.nm.us</u>>; Smith, Cory, EMNRD <<u>Cory.Smith@state.nm.us</u>> Subject: RE: Harvest Midstream - Trunk L - Update

Good afternoon Kijun,

The OCD grants Harvest an 30 day extension to remediate the referenced release. The final C-141 shall be submitted to the OCD by the close of business on April 12, 2019.

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

From: Kijun Hong <<u>khong@harvestmidstream.com</u>> Sent: Tuesday, March 12, 2019 1:30 PM To: Fields, Vanessa, EMNRD <<u>Vanessa.Fields@state.nm.us</u>> Cc: <u>bherb@ltenv.com</u> Subject: [EXT] Harvest Midstream - Trunk L - Update

Vanessa,

On December 14, 2018, approximately 22 barrels (bbl) of condensate overflowed from an aboveground tank in a tank battery associated with, and just south of the Trunk L facility. The release was contained within the lined secondary containment and 22 bbl of condensate were removed via vacuum truck upon discovery of the release. An initial C-141 was submitted on December 28, 2018, and NMOCD assigned the release incident number nVF1900731813.

Due to snow and ice accumulation, a preliminary liner inspection was delayed until 2/5/2019. During the liner inspection, small holes were observed in the liner. The liner was pulled back and stained soil was observed to at least 1 foot below ground surface. Ten soil samples were collected from beneath the liner for field screening using a photoionization detector (PID). The PID measurements ranged from 187 parts per million (ppm) to 6,519 ppm. Further investigation and delineation of the release has been delayed due to poor weather, road conditions, and continued pooling snow and water within the containment.

Harvest has decided to retain a consultant to conduct a more detailed investigation. As a result of the liquids accumulation, Harvest is requesting an extension to the 90-day requirement for site characterization or closure reporting required in 19.15.29.11.A NMAC. The 90-day deadline is March 14, 2019. Harvest requests an extension until March 31, 2019. Harvest intends to have a vacuum truck onsite Wednesday March 13, 2019 to remove any standing precipitation in the containment area. LT Environmental will be onsite immediately afterward on Wednesday March 13, 2019, to delineate vertical and horizontal impacts to soil via hand auger. Soil samples will be submitted to Hall Analytical Laboratories for analysis of TPH, BTEX, and chloride. Based on results of analytical analysis, Harvest will submit a comprehensive remediation plan by the extension deadline. If LT Environmental encounters refusal or is unable to obtain vertical extent via hand auger, a follow up email will be submitted to the NMOCD detailing the attempt and the next course of action.

Form C-141 Page 2 State of New Mexico Oil Conservation Division

Incident ID	NVF1900731813.
District RP	
Facility ID	
Application ID	

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

### **Initial Response**

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

 $\boxtimes$  The source of the release has been stopped.

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

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

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

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

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

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

Printed Name:Kijun Hong	Title: Environmental Specialist	
Signature: 25° 46	Date: <u>12/28/2018</u>	
email: khong@harvestmidstream.com	Telephone: <u>505-436-8457</u>	
OCD Only		
Received by:	Date:	

Form C-141 Page 3 State of New Mexico Oil Conservation Division

Incident ID	NVF1900731813.
District RP	
Facility ID	
Application ID	

# Site Assessment/Characterization

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

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

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

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

Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.

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.

Form C-141	State of New Mexico		Incident ID	NVF1900731813.
Page 4	Oil Conservation Divisi	ion	District RP	
			Facility ID	
			Application ID	
regulations all operators are public health or the environm failed to adequately investige	_ 73° #61	e notifications and perform of the OCD does not relieve the a threat to groundwater, surfa	orrective actions for rele e operator of liability sh ace water, human health liance with any other fe al Specialist	eases which may endanger ould their operations have or the environment. In
OCD Only				
Received by:		Date:		

Form C-141 Page 5 State of New Mexico Oil Conservation Division

Incident ID	NVF1900731813.
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

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

Detailed description of proposed remediation technique

Scaled sitemap with GPS coordinates showing delineation points

Estimated volume of material to be remediated

Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC

Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

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

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

Extents of contamination must be fully delineated.

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

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

Printed Name: Kijun Hong	Title: Environmental Specialist
Signature: // // //	Date: <u>5/31/2019</u>
email: khong@harvestmidstream.com	Telephone: (505) 632-4475
<u>OCD Only</u>	
Received by: 4047	Date: <u>5/31/19</u>
Approved With Attached Conditions of A	Approval Denied Deferral Approved
Signature:	Date: 6/21/19
(	
( OA : Sept via email 3	Attached.



LT Environmental, Inc.

848 East Second Avenue Durango, Colorado 81301 970.385.1096

May 31, 2019

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

RE: Remediation Work Plan Trunk L Tank Battery Harvest Four Corners, LLC Incident Number NVF1900731813 Rio Arriba, New Mexico

Dear Mr. Smith:

LT Environmental, Inc. (LTE), on behalf of Harvest Four Corners, LLC (Harvest), presents the following remediation work plan associated with subsurface petroleum hydrocarbon impacts encountered at the Trunk L tank battery (Site). The Site is located in Unit A, Section 28, Township 28 North, Range 5 West, in Rio Arriba County, New Mexico (Figure 1).

This remediation work plan is being submitted in response to a rejection on May 2, 2019, by the New Mexico Oil Conservation Division (NMOCD) of a deferral request submitted on April 12, 2019. The site history, and previous delineation of petroleum hydrocarbon impacts to soil were described in the previously submitted report. This remediation work plan was prepared to address the concerns characterized by the NMOCD, as elevated levels of combined total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO) remaining in the subsurface within the secondary containment. There is also possible groundwater at 78 feet below ground surface (bgs) based on a deep-ground bed cathodic well protection well located at Hilcorp Energy Corporation gas well San Juan 28-5 Unit No. 048.

#### BACKGROUND

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC), as described in the *Closure Request* submitted April 12, 2019. The following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg TPH; 1,000 mg/kg combined GRO and DRO; and 10,000 mg/kg chloride.

Soil samples collected during delineation activities were primarily composed of clayey sand to sandy lithologies. Field-identified soil impacts consisting of petroleum hydrocarbon odors and





elevated field screening results were observed in soil sample locations BH01 and BH-7. Laboratory analytical results confirmed field observations and indicated that two soil samples exceeded the NMOCD Table 1 closure criteria of 1,000 mg/kg combined GRO and DRO:

- BH01 at 20 feet bgs; and
- BH-7 at 8 feet to 10 feet bgs.

Soil sample locations and laboratory analytical results are illustrated on Figure 2.

#### PROPOSED REMEDIATION PLAN

Soil vapor extraction (SVE) is being proposed to remediate the petroleum hydrocarbon impacts to soil. SVE technology remediates petroleum hydrocarbon impacts *in situ* by applying a vacuum to wells drilled into the impacted area. The applied vacuum initiates air flow from the subsurface and into the SVE wells. The subsurface air flow enhances petroleum hydrocarbon volatilization, and the vapors are pulled out by a blower/vacuum pump at the surface. The removed petroleum hydrocarbons are typically emitted directly into the atmosphere unless air permitting thresholds or sensitive receptors require air treatment for petroleum hydrocarbon removal.

To remediate the petroleum hydrocarbon impacts to soil, LTE initially proposes installing six SVE wells with screened intervals ranging from 5 feet to 40 feet bgs. The SVE wells will be nested, with three separate boreholes containing two SVE wells each. Based on the observed lithology at the Site, a conservative radius of influence of approximately 27.5 feet was used for each remediation well in the SVE design. The remediation system layout is depicted on Figure 3, and the screened intervals for each remediation well is detailed in the following table:

Well ID	Screened Interval (feet bgs)
SVE01	5 to 15
SVE02	25 to 35
SVE03	10 to 20
SVE04	30 to 40
SVE05	5 to 15
SVE06	25 to 35

LTE proposes using solar power for the SVE system due to the remoteness and the lack of sufficient electrical supply at the Site. The SVE wells will be connected via aboveground piping to a 2.75 horsepower blower capable of producing 105 cubic feet per minute (cfm) at 50 inches of water column vacuum, with a maximum vacuum capability of 84 inches of water column.





Each SVE well will have its own adjustable valve and vacuum gauge on a manifold to control flows.

The blower will be powered by ten solar panels with a nominal maximum power output of 3,050 watts. The blower is connected to the solar panels via a motor controller that automatically starts the system as soon as there is sunlight available and throttles the blower up as sun power increases throughout the day to maximize efficiency. Seasonally, there is approximately ten hours in the winter and 12 hours in the summer of solar power available in Farmington, New Mexico. The complete solar SVE system is constructed as one unit designed for potential remediation use at other off-grid locations and can operate completely autonomous.

#### TIMELINE

The following timeline is proposed with day zero being the day this workplan receives approval.

- Installing six SVE wells 30 days; and
- Installing and starting the solar SVE system 90 days.

Quarterly reporting will be conducted after installing the SVE system to inform NMOCD on major site advancements and solar SVE system operations. Quarterly reports will document petroleum hydrocarbon mass recovery, system runtime, and gas sample analysis. An annual gas sample will be collected from the SVE system stack and submitted for analysis of full volatile organic compounds (VOCs) by United States Environmental Protection Agency Method 8260. Additional quarterly gas samples will be collected and analyzed for BTEX and TPH. Air samples will be field screened with a photo-ionization detector for VOCs.

LTE recommends observing VOCs and/or air samples from each SVE well periodically to assess system performance and effectiveness. Initially, biweekly visits to check system operations and conduct any necessary maintenance will be conducted. After 2 months, visits will be reduced to a monthly frequency.

Once a decline in VOCs is observed and indicates that petroleum hydrocarbon impacts have been reduced, Harvest will conduct additional soil sampling to investigate potential residual subsurface impacts and request closure or additional system operations based on the results. LTE anticipates one year of operation to obtain site closure. LTE will use a hollow-stem auger soil boring and sampling program using a CME 55 drill rig to advance two boreholes to approximately 40 feet bgs. Boreholes will be in locations approximately equidistant between SVE borehole locations to confirm successful remediation and will be used as confirmation closure samples. Discrete soil samples will be collected every five feet from immediately beneath the ground surface to total depth and field screened for VOCs. Soil samples with the





Smith, C. Page 4

highest observed field screening and the terminus of the boring will be collected and submitted for laboratory analysis of BTEX, TPH, and chloride.

Should the final confirmation soil samples be compliant with the NMOCD Table 1 closure criteria, LTE will summarize the laboratory analysis and sampling activities in a subsequent report requesting closure of the release event. Should the results indicate soil impacts exceed NMOCD Table 1 closure criteria, LTE will continue to operate the system and potentially make adjustments base on the results of the investigation.

We look forward to your review of this report and subsequent approval of the remediation approach. If you have any questions or comments, please do not hesitate to contact Mr. Danny Burns at (970) 385-1096 or <u>dburns@ltenv.com</u>.

Sincerely,

LT ENVIRONMENTAL, INC.

Danny Burns Project Geologist

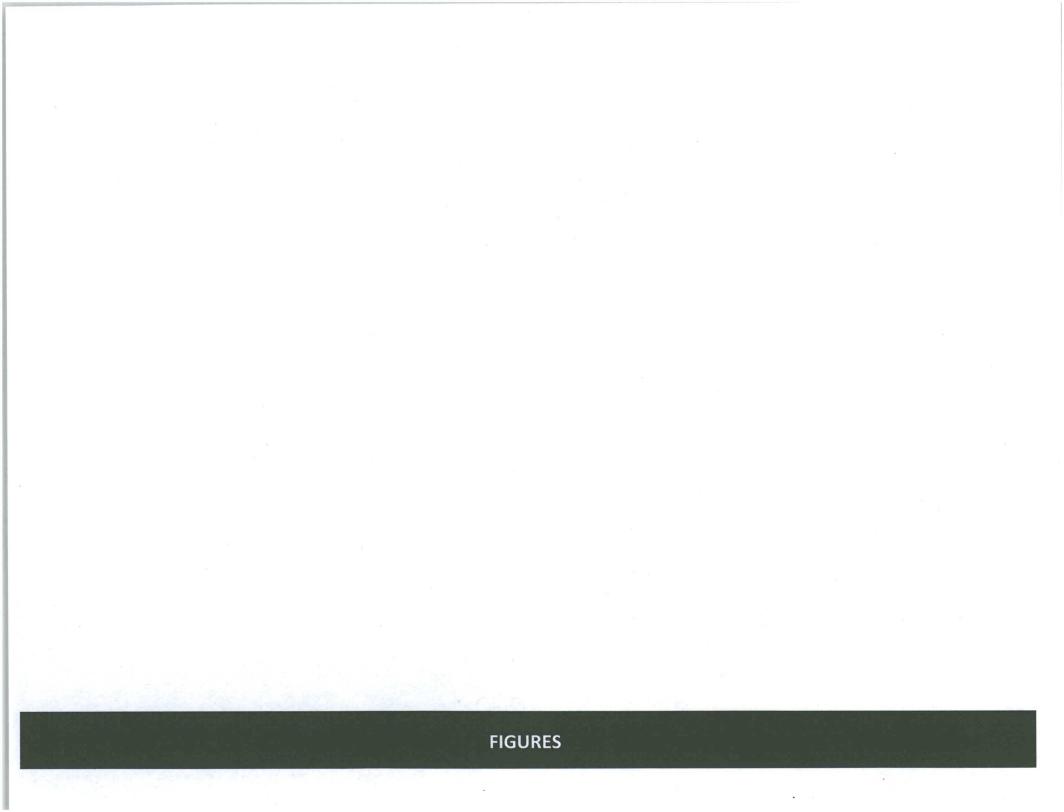
Ashley L. ager

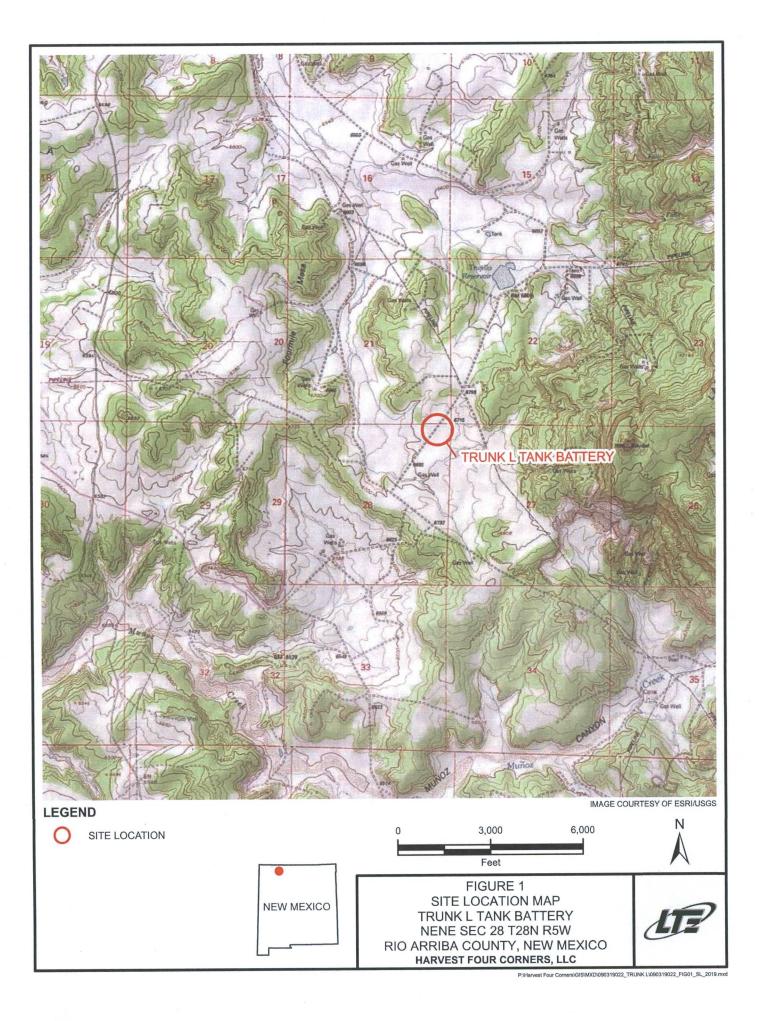
Ashley Ager, P.G. Senior Geologist

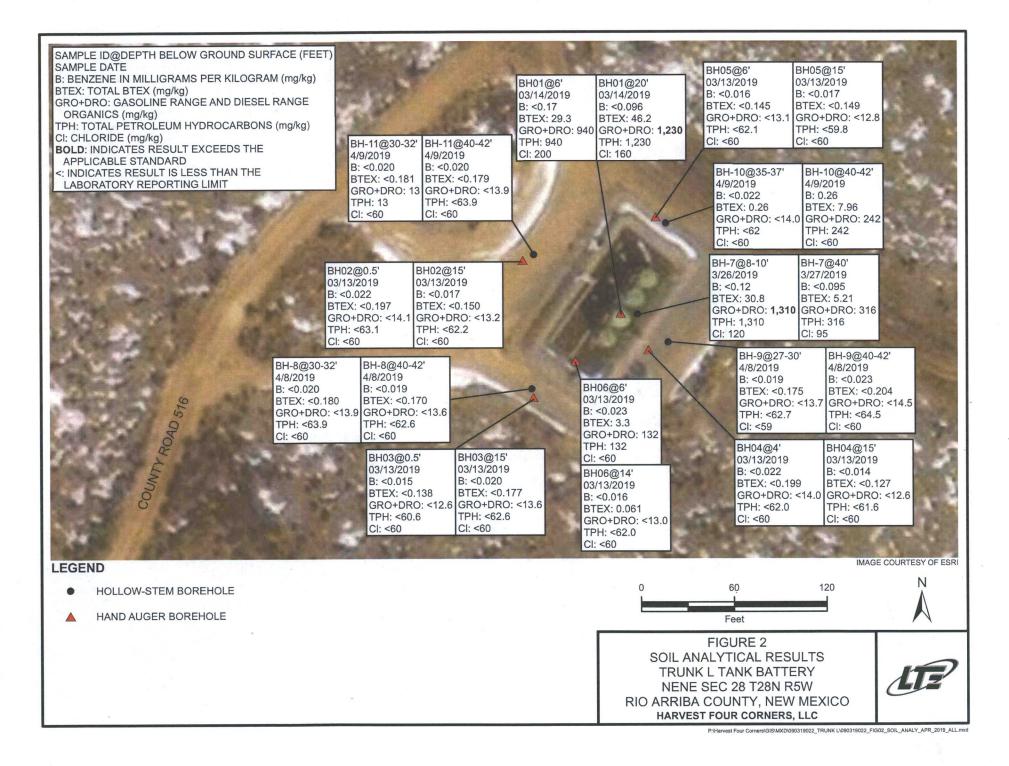
Attachments:

Figure 1 – Site Location Map Figure 2 – Soil Analytical Results Figure 3 – SVE System Layout Table 1 – Soil Analytical Results Attachment 1 – Laboratory Analytical Reports

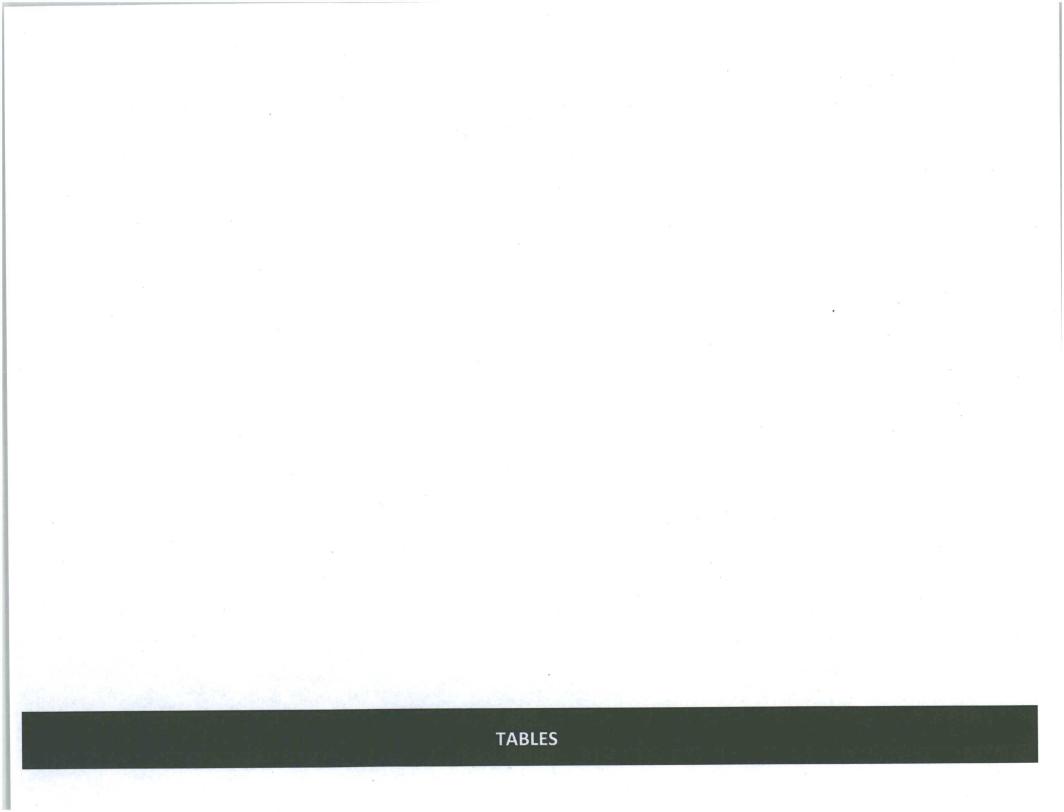












#### TABLE 1 SOIL ANALYTICAL RESULTS

#### TRUNK L TANK BATTERY RIO ARRIBA COUNTY, NEW MEXICO HARVEST FOUR CORNERS, LLC

Soil Boring	Sample . Date	Depth (feet)	Vapor (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	Combined GRO, DRO (mg/kg)	MRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
Hand Auger	Boreholes	earling a	SPANDA SHE	ALC: YES			S. Magnetics	Strangenty St	a martine		S Difference			in Partick
BH01	3/14/2019	6	2,196	<0.17	5.9	1.4	22	29.3	870	70	940	<49	940	200
BH01	3/14/2019	20	1,910	<0.096	13	2.2	31	46.2	1,100	130	1,230	<48	1,230	160
BH02	3/13/2019	0.5	0.2	<0.022	<0.044	<0.044	<0.087	<0.197	<4.4	<9.7	<14.1	<49	<63.1	<60
BH02	3/13/2019	15	0.0	<0.017	< 0.033	<0.033	<0.067	<0.150	<3.3	<9.9	<13.2	<49	<62.2	<60
BH03	3/13/2019	0.5	0.4	<0.015	< 0.031	<0.031	<0.061	<0.138	<3.1	<9.5	<12.6	<48	<60.6	<60
BH03	3/13/2019	15	0.1	<0.020	<0.039	<0.039	<0.079	<0.177	<3.9	<9.7	<13.6	<49	<62.6	<60
BH04	3/13/2019	4	0.7	<0.022	<0.044	<0.044	<0.089	<0.199	<4.4	<9.6	<14.0	<48	<62.0	<60
BH04	3/13/2019	15	0.1	<0.014	<0.028	<0.028	<0.057	<0.127	<2.8	<9.8	<12.6	<49	<61.6	<60
BH05	3/13/2019	6	0.7	<0.016	<0.032	<0.032	<0.065	<0.145	<3.2	<9.9	<13.1	<49	<62.1	<60
BH05	3/13/2019	15	0.2	<0.017	<0.033	<0.033	<0.066	<0.149	<3.3	<9.5	<12.8	<47	<59.8	<60
BH06	3/13/2019	6	273.5	<0.023	0.39	0.11	2.8	3.3	120	12	132	<48	132	<60
BH06	3/13/2019	14	7.6	<0.016	0.061	<0.032	<0.064	0.061	<3.2	<9.8	<13.0	<49	<62.0	<60
Hollow-stem	Boreholes	States ( 1996)	Stored Istored		Mar Reality		家などかい独立	in the set of the		-Arth 2012			a fail a fail	
BH-7	3/26/2019	8-10	2,359	<0.12	4.3	1.5	25	30.8	1,000	310	1,310	<50	1,310	120
BH-7	3/27/2019	40	1,981	<0.095	1.4	0.21	3.6	5.21	230	86	316	<48	316	95
BH-8	4/8/2019	30-32	34.3	<0.020	<0.040	<0.040	<0.080	<0.180	<4.0	<9.9	<13.9	<50	<63.9	<60
BH-8	4/8/2019	40-42	10.9	<0.019	<0.038	<0.038	<0.075	<0.170	<3.8	<9.8	<13.6	<49	<62.6	<60
BH-9	4/8/2019	27-30	38.2	< 0.019	<0.039	<0.039	<0.078	<0.175	<3.9	<9.8	<13.7	<49	<62.7	<59
BH-9	4/8/2019	40-42	22.0	< 0.023	<0.045	<0.045	<0.091	<0.204	<4.5	<10	<14.5	<50	<64.5	<60
BH-10	4/9/2019	35-37	379.4	<0.022	0.13	<0.044	0.13	0.26	<4.4	<9.6	<14.0	<48	<62	<60
BH-10	4/9/2019	40-42	404.2	0.26	2.9	<0.38	4.8	7.96	210	32	242	<49	242	<60
BH-11	4/9/2019	30-32	24.8	<0.020	<0.040	<0.040	<0.081	<0.181	<4.0	13	13	<48	13	<60
BH-11	4/9/2019	40-42	21.4	<0.020	<0.040	<0.040	<0.079	<0.179	<4.0	<9.9	<13.9	<50	<63.9	<60
N	MOCD Table 1	<b>Closure</b> Crit	eria	10	NE	NE	NE	50	NE	NE	1,000	NE	2,500	5,000

#### NOTES:

- BTEX benzene, toluene, ethylbenzene, total xylenes DRO - diesel range organics
- GRO gasoline range organics
- mg/kg milligrams per kilogram

MRO - motor oil range organics NE - not established NMOCD - New Mexico Oil Conservation Division ppm - parts per million TPH- total petroleum hydrocarbons Bold - indicates value exceeds stated NMOCD standard < -indicates value is less than stated laboratory reporting 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

March 21, 2019

Kijun Hong Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475 FAX

RE: Trunk L Delineation

OrderNo.: 1903784

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 12 sample(s) on 3/16/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall E	Hall Environmental Analysis Laboratory, Inc.         Date Reported: 3/21/2019										
CLIENT: Project:	Harvest Trunk L Delineation		Client Sample ID: BH02 @ 0.5' Collection Date: 3/13/2019 11:30:00 AM								
Lab ID:	1903784-001	Matrix: MEOH (S					6/2019 10:50:00 AM				
Analyses	3	Result	RL	Qual	Units	DF	Date Analyzed	Batch			
EPA MET	THOD 300.0: ANIONS						Analyst	MRA			
Chloride		ND	60		mg/Kg	20	3/18/2019 5:58:45 PM	43728			
EPA MET	THOD 8015D MOD: GASOLIN	IE RANGE					Analyst	RAA			
	e Range Organics (GRO)	ND	4.4		mg/Kg	1	3/18/2019 3:32:05 PM	G58448			
Surr:	BFB	103	70-130		%Rec	1	3/18/2019 3:32:05 PM	G58448			
EPA MET	THOD 8015M/D: DIESEL RAM	IGE ORGANICS					Analyst	Irm			
Diesel R	ange Organics (DRO)	ND	9.7		mg/Kg	1	3/19/2019 9:39:16 AM	43721			
Motor O	il Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2019 9:39:16 AM	43721			
Surr:	DNOP	114	70-130		%Rec	1	3/19/2019 9:39:16 AM	43721			
EPA ME	THOD 8260B: VOLATILES SI	HORT LIST					Analyst	RAA			
Benzene	2	ND	0.022		mg/Kg	1	3/18/2019 3:32:05 PM	SLS5844			
Toluene	-	ND	0.044		mg/Kg	1	3/18/2019 3:32:05 PM	SLS5844			
Ethylber	nzene	ND	0.044		mg/Kg	1	3/18/2019 3:32:05 PM	SLS5844			
Xylenes	, Total	ND	0.087		mg/Kg	1	3/18/2019 3:32:05 PM	SLS5844			
Surr:	4-Bromofluorobenzene	97.4	70-130		%Rec	1	3/18/2019 3:32:05 PM	SLS5844			
Surr:	Toluene-d8	97.7	70-130		%Rec	1	3/18/2019 3:32:05 PM	SLS5844			

Qualifiers:

\*

Value exceeds Maximum Contaminant Level.

- Sample Diluted Due to Matrix D
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank В
- Value above quantitation range E
- Analyte detected below quantitation limits Page 1 of 16 J
- Sample pH Not In Range Р
- RL Reporting Detection Limit

Sample container temperature is out of limit as specified W

**Analytical Report** Lab Order 1903784

Hall Environmental Analysis	Date Reported: 3/21/201	9					
CLIENT: Harvest Project: Trunk L Delineation							
Lab ID: 1903784-002	Matrix: MEOH (S	SOIL)	Receiv	ed Dat	e: 3/1	6/2019 10:50:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	ND	60		mg/Kg	20	3/18/2019 6:11:10 PM	43728
EPA METHOD 8015D MOD: GASOLINE R	ANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	3/18/2019 4:00:31 PM	G58448
Surr: BFB	101	70-130		%Rec	1	3/18/2019 4:00:31 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst:	Irm
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/19/2019 10:25:00 AM	<mark>4372</mark> 1
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2019 10:25:00 AM	43721
Surr: DNOP	111	70-130		%Rec	1	3/19/2019 10:25:00 AM	43721
EPA METHOD 8260B: VOLATILES SHOR	T LIST					Analyst	RAA
Benzene	ND	0.017		mg/Kg	1	3/18/2019 4:00:31 PM	SLS5844
Toluene	ND	0.033		mg/Kg	1	3/18/2019 4:00:31 PM	SLS5844
Ethylbenzene	ND	0.033		mg/Kg	1	3/18/2019 4:00:31 PM	SLS5844
Xylenes, Total	ND	0.067		mg/Kg	1	3/18/2019 4:00:31 PM	SLS5844
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	3/18/2019 4:00:31 PM	SLS5844
Surr: Toluene-d8	94.9	70-130		%Rec	1	3/18/2019 4:00:31 PM	SLS5844

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associa
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantit
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit

% Recovery outside of range due to dilution or matrix S

iated Method Blank

titation limits Page 2 of 16

**Analytical Report** Lab Order 1903784

Sample container temperature is out of limit as specified W

Hall Er	Hall Environmental Analysis Laboratory, Inc.						Date Reported: 3/21/2019		
CLIENT: HarvestClient Sample ID: BH03 @ 0.5Project:Trunk L DelineationLab ID:1903784-003Matrix:MEOH (SOIL)Received Date: 3/16/2019 10						3/2019 1:06:00 PM			
Analyses		Result	RL	Qual U	J <b>nits</b>	DF	Date Analyzed	Batch	
EPA MET Chloride	HOD 300.0: ANIONS	ND	60	n	ng/Kg	20	Analyst: 3/18/2019 6:23:34 PM	<b>MRA</b> 43728	
	HOD 8015D MOD: GASOLINE Range Organics (GRO) 3FB	ND 104	3.1 70-130		ng/Kg %Rec	1 1	Analyst: 3/18/2019 4:29:02 PM 3/18/2019 4:29:02 PM	<b>RAA</b> G58448 G58448	
Diesel Ra	HOD 8015M/D: DIESEL RANG ange Organics (DRO) I Range Organics (MRO) DNOP	E ORGANICS ND ND 115	9.5 48 70-130	r	ng/Kg ng/Kg %Rec	1 1 1	Analyst: 3/19/2019 10:46:55 AM 3/19/2019 10:46:55 AM 3/19/2019 10:46:55 AM	43721 43721	
Benzene Toluene Ethylben Xylenes, Surr: 4	zene	RT LIST ND ND ND 98.7 99.1	0.015 0.031 0.031 0.061 70-130 70-130	r r ç	ng/Kg ng/Kg ng/Kg %Rec %Rec	1 1 1 1 1	Analyst: 3/18/2019 4:29:02 PM 3/18/2019 4:29:02 PM 3/18/2019 4:29:02 PM 3/18/2019 4:29:02 PM 3/18/2019 4:29:02 PM	RAA SLS5844 SLS5844 SLS5844 SLS5844 SLS5844 SLS5844	

Value exceeds Maximum Contaminant Level. В Qualifiers: \* E D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded J

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits Page 3 of 16

**Analytical Report** Lab Order 1903784

- Р Sample pH Not In Range
- Reporting Detection Limit RL

Sample container temperature is out of limit as specified W

Hall Environmental Analysis Laboratory, Inc.						Date Reported: 3/21/2019				
CLIENT: Harvest Project: Trunk L Delineation Lab ID: 1903784-004	Matrix:	Client Sample ID: BH03 @ 15' Collection Date: 3/13/2019 1:50:00 PM Matrix: MEOH (SOIL) Received Date: 3/16/2019 10:50:00 AM								
Analyses		esult		Qual	Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS							Analyst:	MRA		
Chloride		ND	60		mg/Kg	20	3/18/2019 6:35:59 PM	43728		
EPA METHOD 8015D MOD: GASOLINE	RANGE						Analyst:	RAA		
Gasoline Range Organics (GRO)		ND	3.9		mg/Kg	1	3/18/2019 4:57:46 PM	G58448		
Surr: BFB		101	70-130		%Rec	1	3/18/2019 4:57:46 PM	G58448		
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S					Analyst:	Irm		
Diesel Range Organics (DRO)		ND	9.7		mg/Kg	1	3/19/2019 11:09:00 AM	43721		
Motor Oil Range Organics (MRO)		ND	49		mg/Kg	1	3/19/2019 11:09:00 AM	43721		
Surr: DNOP		104	70-130		%Rec	1	3/19/2019 11:09:00 AM	43721		
EPA METHOD 8260B: VOLATILES SHO	RT LIST						Analyst:	RAA		
Benzene		ND	0.020		mg/Kg	1	3/18/2019 4:57:46 PM	SLS5844		
Toluene		ND	0.039		mg/Kg	1	3/18/2019 4:57:46 PM	SLS5844		
Ethylbenzene		ND	0.039		mg/Kg	1	3/18/2019 4:57:46 PM	SLS5844		
Xylenes, Total		ND	0.079		mg/Kg	1	3/18/2019 4:57:46 PM	SLS5844		
Surr: 4-Bromofluorobenzene		98.7	70-130		%Rec	1	3/18/2019 4:57:46 PM	SLS5844		
Surr: Toluene-d8	2	93.6	70-130		%Rec	1	3/18/2019 4:57:46 PM	SLS5844		

Qualifiers:

Value exceeds Maximum Contaminant Level. \*

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank

Value above quantitation range E

- Analyte detected below quantitation limits Page 4 of 16 J
- Sample pH Not In Range Р
- RL Reporting Detection Limit

Sample container temperature is out of limit as specified W

**Analytical Report** Lab Order 1903784

Hall E	nvironmental Analy		Date Reported: 3/21/2019						
CLIENT:				t Sample ID: BH04 @ 4' lection Date: 3/13/2019 11:20:00 AM					
Project: Lab ID:	Trunk L Delineation 1903784-005	Matrix: MEOH (		 		6/2019 10:50:00 AM			
Analyses		Result		Units		Date Analyzed	Batch		
EPA MET	THOD 300.0: ANIONS					Analyst:	MRA		
Chloride		ND	60	mg/Kg	20	3/18/2019 6:48:23 PM	43728		
EPA MET	THOD 8015D MOD: GASOLIN	NE RANGE				Analyst:	RAA		
Gasoline	e Range Organics (GRO)	ND	4.4	mg/Kg	1	3/18/2019 5:26:25 PM	G58448		
Surr:		101	70-130	%Rec	1	3/18/2019 5:26:25 PM	G58448		
EPA MET	THOD 8015M/D: DIESEL RAM	NGE ORGANICS				Analyst:	Irm		
Diesel R	ange Organics (DRO)	ND	9.6	mg/Kg	1	3/19/2019 11:30:59 AM	43721		
Motor Oi	il Range Organics (MRO)	ND	48	mg/Kg	1	3/19/2019 11:30:59 AM	43721		
Surr:	DNOP	107	70-130	%Rec	1	3/19/2019 11:30:59 AM	43721		
EPA ME	THOD 8260B: VOLATILES SI	HORT LIST				Analyst	RAA		
Benzene	9	ND	0.022	mg/Kg	1	3/18/2019 5:26:25 PM	SLS5844		
Toluene		ND	0.044	mg/Kg	1	3/18/2019 5:26:25 PM	SLS5844		
Ethylber	nzene	ND	0.044	mg/Kg	1	3/18/2019 5:26:25 PM	SLS5844		
Xylenes,	, Total	ND	0.089	mg/Kg	1	3/18/2019 5:26:25 PM	SLS5844		
Surr:	4-Bromofluorobenzene	97.8	70-130	%Rec	1	3/18/2019 5:26:25 PM	SLS5844		
Surr:	Toluene-d8	95.8	70-130	%Rec	1	3/18/2019 5:26:25 PM	SLS5844		

Qualifiers:

- Value exceeds Maximum Contaminant Level. \*
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded H
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- Analyte detected below quantitation limits Page 5 of 16 J

**Analytical Report** Lab Order 1903784

- Р Sample pH Not In Range
- RL **Reporting Detection Limit**

Sample container temperature is out of limit as specified W

Hall Environmental Analysis I	Date Reported: 3/21/2019								
CLIENT: Harvest Project: Trunk L Delineation Lab ID: 1903784-006	Client Sample ID: BH04 @ 15' Collection Date: 3/13/2019 11:40:00 AM Matrix: MEOH (SOIL) Received Date: 3/16/2019 10:50:00 AM								
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst:	MRA			
Chloride	ND	60	mg/Kg	20	3/18/2019 7:00:48 PM	43728			
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst:	RAA			
Gasoline Range Organics (GRO)	ND	2.8	mg/Kg	1	3/18/2019 5:55:01 PM	G58448			
Surr: BFB	97.7	70-130	%Rec	1	3/18/2019 5:55:01 PM	G58448			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	Irm			
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	3/19/2019 11:53:06 AM	43721			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/19/2019 11:53:06 AM	43721			
Surr: DNOP	110	70-130	%Rec	1	3/19/2019 11:53:06 AM	43721			
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst	RAA			
Benzene	ND	0.014	mg/Kg	1	3/18/2019 5:55:01 PM	SLS5844			
Toluene	ND	0.028	mg/Kg	1	3/18/2019 5:55:01 PM	SLS5844			
Ethylbenzene	ND	0.028	mg/Kg	1	3/18/2019 5:55:01 PM	SLS5844			
Xylenes, Total	ND	0.057	mg/Kg	1	3/18/2019 5:55:01 PM	SLS5844			
Surr: 4-Bromofluorobenzene	98.2	70-130	%Rec	1	3/18/2019 5:55:01 PM	SLS5844			
Surr: Toluene-d8	92.9	70-130	%Rec	1	3/18/2019 5:55:01 PM	SLS5844			

Refe	er to th	e QC Summary report and sample login checking	st ior maga	ged QC data and preservation
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	POL	Practical Quanitative Limit	RL	Reporting Detection Limit

S % Recovery outside of range due to dilution or matrix

- ed Method Blank
- tion limits Page 6 of 16
- ٦ŀ

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory Inc

**Analytical Report** Lab Order 1903784

-1. 2/21/2010

Analytical	Report
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Lab Order 1903784

Date Reported: 3/21/2019

3/18/2019 6:23:33 PM

1

%Rec

SLS5844

## Hall Environmental Analysis Laboratory, Inc.

Surr: Toluene-d8

CLIENT: Harvest		Client Sample ID: BH05 @ 6' Collection Date: 3/13/2019 1:30:00 PM							
<b>Project:</b> Trunk L Delineation									
Lab ID: 1903784-007	Matrix: ME	COH (SOIL)	Received Dat	te: 3/1	6/2019 10:50:00 AM				
Analyses	Resul	t RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	MRA			
Chloride	N	60	mg/Kg	20	3/18/2019 7:38:00 PM	43728			
EPA METHOD 8015D MOD: GAS	OLINE RANGE				Analyst	RAA			
Gasoline Range Organics (GRO)	N	3.2	mg/Kg	1	3/18/2019 6:23:33 PM	G58448			
Surr: BFB	10	0 70-130	%Rec	1	3/18/2019 6:23:33 PM	G58448			
EPA METHOD 8015M/D: DIESEL	RANGE ORGANICS				Analyst	CLP			
Diesel Range Organics (DRO)	N	9.9	mg/Kg	1	3/19/2019 10:01:56 AM	43721			
Motor Oil Range Organics (MRO)	N	49	mg/Kg	1	3/19/2019 10:01:56 AM	43721			
Surr: DNOP	95.	7 70-130	%Rec	1	3/19/2019 10:01:56 AM	43721			
EPA METHOD 8260B: VOLATILE	S SHORT LIST				Analyst	RAA			
Benzene	NI	0.016	mg/Kg	1	3/18/2019 6:23:33 PM	SLS584			
Toluene	NI	0.032	mg/Kg	1	3/18/2019 6:23:33 PM	SLS584			
Ethylbenzene	N	0.032	mg/Kg	1	3/18/2019 6:23:33 PM	SLS584			
Xylenes, Total	N	0.065	0 0	1	3/18/2019 6:23:33 PM	SLS584			
Surr: 4-Bromofluorobenzene	10	0 70-130	%Rec	1	3/18/2019 6:23:33 PM	SLS584			

93.7

70-130

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	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 Page 7 of 16
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quanitative 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	Date Reported: 3/21/201	9							
CLIENT: Harvest Project: Trunk L Delineation	Client Sample ID: BH05 @ 15' Collection Date: 3/13/2019 2:00:00 PM								
Lab ID: 1903784-008	Matrix: MEOH	(SOIL)	Received Da	ate: 3/1	6/2019 10:50:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst:	MRA			
Chloride	ND	60	mg/K	g 20	3/18/2019 7:50:25 PM	43728			
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst:	RAA			
Gasoline Range Organics (GRO)	ND	3.3	mg/K	g 1	3/18/2019 6:51:58 PM	G58448			
Surr: BFB	99.7	70-130	%Red	; 1	3/18/2019 6:51:58 PM	G58448			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	CLP			
Diesel Range Organics (DRO)	ND	9.5	mg/K	g 1	3/19/2019 10:25:44 AM	43721			
Motor Oil Range Organics (MRO)	ND	47	mg/K	g 1	3/19/2019 10:25:44 AM	43721			
Surr: DNOP	97.8	70-130	%Red	; 1	3/19/2019 10:25:44 AM	43721			
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst	RAA			
Benzene	ND	0.017	mg/K	g 1	3/18/2019 6:51:58 PM	SLS5844			
Toluene	ND	0.033	mg/K	g √1	3/18/2019 6:51:58 PM	SLS5844			
Ethylbenzene	ND	0.033	mg/K	g 1	3/18/2019 6:51:58 PM	SLS5844			
Xylenes, Total	ND	0.066	mg/K	g 1	3/18/2019 6:51:58 PM	SLS5844			
Surr: 4-Bromofluorobenzene	101	70-130	%Red	: 1	3/18/2019 6:51:58 PM	SLS5844			
Surr: Toluene-d8	96.9	70-130	%Red	: 1	3/18/2019 6:51:58 PM	SLS5844			

Refer to the QC Summary report and sample rogin encounst for magbed QC and and pr

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits Page 8 of 16

Analytical Report Lab Order 1903784

- P Sample pH Not In Range
- RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.   Date Reported: 3									
CLIENT: Harvest							101 @ 6'		
Project: Trunk L Delineation			(	Collect	ion Dat	e: 3/1	4/2019 1:20:00 PM		
Lab ID: 1903784-009	Matrix:	MEOH	(SOIL)	Receiv	ved Dat	e: 3/1	6/2019 10:50:00 AM		
Analyses	Re	esult	RL	Qual	Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS							Analyst:	MRA	
Chloride		200	60		mg/Kg	20	3/18/2019 8:02:49 PM	43728	
EPA METHOD 8015D MOD: GASOLINE I	RANGE						Analyst:	RAA	
Gasoline Range Organics (GRO)		870	35		mg/Kg	10	3/18/2019 7:20:34 PM	G58448	
Surr: BFB		102	70-130		%Rec	10	3/18/2019 7:20:34 PM	G58448	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S					Analyst:	Irm	
Diesel Range Organics (DRO)		70	9.8		mg/Kg	1	3/19/2019 12:15:08 PM	43721	
Motor Oil Range Organics (MRO)		ND	49		mg/Kg	1	3/19/2019 12:15:08 PM	43721	
Surr: DNOP		117	70-130		%Rec	1	3/19/2019 12:15:08 PM	43721	
EPA METHOD 8260B: VOLATILES SHO	RT LIST						Analyst	RAA	
Benzene		ND	0.17		mg/Kg	10	3/18/2019 7:20:34 PM	SLS5844	
Toluene		5.9	0.35		mg/Kg	10	3/18/2019 7:20:34 PM	SLS5844	
Ethylbenzene		1.4	0.35		mg/Kg	10	3/18/2019 7:20:34 PM	SLS5844	
Xylenes, Total		22	0.69		mg/Kg	10	3/18/2019 7:20:34 PM	SLS5844	
Surr: 4-Bromofluorobenzene		95.9	70-130		%Rec	10	3/18/2019 7:20:34 PM	SLS5844	
Surr: Toluene-d8		98.3	70-130		%Rec	10	3/18/2019 7:20:34 PM	SLS5844	

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 16
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	PQL	Practical Quanitative 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

vironmental Analysis Laboratory Inc .11 17 TT

**Analytical Report** Lab Order 1903784 1. 2/21/2010 -. .

	Ivironmental Anal		Date Reported: 3/21/2019								
CLIENT:	Harvest	,	1	Cl	Client Sample ID: BH01 @ 20'						
<b>Project:</b>	Trunk L Delineation		Collection Date: 3/14/2019 2:40:00 PM								
Lab ID:	1903784-010	Matrix:	MEO	H (SOIL)	Recei	ved Dat	<b>e:</b> 3/1	6/2019 10:50:00 AM			
Analyses		R	esult	RL	Qual	Units	DF	Date Analyzed	Batch		
EPA MET	HOD 300.0: ANIONS							Analyst	MRA		
Chloride			160	60		mg/Kg	20	3/18/2019 8:15:14 PM	43728		
EPA MET	HOD 8015D MOD: GASOL	INE RANGE						Analyst	RAA		
Gasoline Range Organics (GRO)			1100	19		mg/Kg	5	3/18/2019 7:49:12 PM	G58448		
Surr: E	3FB		103	70-130		%Rec	5	3/18/2019 7:49:12 PM	G58448		
EPA MET	HOD 8015M/D: DIESEL RA		S					Analyst	CLP		
Diesel Ra	ange Organics (DRO)		130	9.7		mg/Kg	1	3/19/2019 11:13:33 AM	43721		
Motor Oi	Range Organics (MRO)		ND	48		mg/Kg	1	3/19/2019 11:13:33 AM	43721		
Surr: [	ONOP		97.6	70-130		%Rec	1	3/19/2019 11:13:33 AM	43721		
EPA MET	HOD 8260B: VOLATILES	SHORT LIST						Analyst	RAA		
Benzene			ND	0.096		mg/Kg	5	3/18/2019 7:49:12 PM	SLS584		
Toluene			13	0.19		mg/Kg	5	3/18/2019 7:49:12 PM	SLS584		
Ethylben	zene		2.2	0.19		mg/Kg	5	3/18/2019 7:49:12 PM	SLS584		
Xylenes,	Total		31	0.38		mg/Kg	5	3/18/2019 7:49:12 PM	SLS584		
Surr: 4	4-Bromofluorobenzene		101	70-130		%Rec	5	3/18/2019 7:49:12 PM	SLS584		
Surr: 7	Toluene-d8		99.2	70-130		%Rec	5	3/18/2019 7:49:12 PM	SLS584		

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits Page 10 of 16
- P Sample pH Not In Range
- RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order 1903784 Date Reported: 3/21/2019

5,			-							
	Client Sample ID: BH06 @ 6'									
	Collection Date: 3/14/2019 4:00:00 PM									
Matrix: MEOH	(SOIL)	<b>Received Dat</b>	<b>e:</b> 3/1	6/2019 10:50:00 AM						
Result	RL	Qual Units	DF	Date Analyzed	Batch					
				Analyst	MRA					
ND	60	mg/Kg	20	3/18/2019 8:27:38 PM	43728					
E RANGE				Analyst	RAA					
120	4.7	mg/Kg	1	3/18/2019 8:17:45 PM	G5844					
99.7	70-130	%Rec	1	3/18/2019 8:17:45 PM	G58448					
GE ORGANICS				Analyst	CLP					
12	9.7	mg/Kg	1	3/19/2019 11:37:30 AM	43721					
ND	48	mg/Kg	1	3/19/2019 11:37:30 AM	43721					
107	70-130	%Rec	1	3/19/2019 11:37:30 AM	43721					
ORT LIST				Analyst	RAA					
ND	0.023	mg/Kg	1	3/18/2019 8:17:45 PM	SLS584					
0.39	0.047	mg/Kg	1	3/18/2019 8:17:45 PM	SLS584					
0.11	0.047	mg/Kg	1	3/18/2019 8:17:45 PM	SLS58					
2.8	0.093	mg/Kg	1	3/18/2019 8:17:45 PM	SLS58					
97.9	70-130	%Rec	1	3/18/2019 8:17:45 PM	SLS58					
93.5	70-130	%Rec	1	3/18/2019 8:17:45 PM	SLS58					
	Result           ND           E RANGE           120           99.7           GE ORGANICS           12           ND           107           ORT LIST           ND           0.39           0.11           2.8           97.9	Matrix:         MEOH (SOIL)           Result         RL           ND         60           E RANGE         120         4.7           120         4.7         99.7         70-130           GE ORGANICS         12         9.7           ND         48         107         70-130           ORT LIST         ND         0.023         0.39         0.047           0.11         0.047         2.8         0.093         97.9         70-130	Matrix:         MEOH (SOIL)         Received Data           Result         RL         Qual         Units           ND         60         mg/Kg           120         4.7         mg/Kg           99.7         70-130         %Rec           GE ORGANICS         12         9.7         mg/Kg           107         70-130         %Rec           ORT LIST         ND         0.023         mg/Kg           0.11         0.047         mg/Kg           0.11         0.047         mg/Kg           97.9         70-130         %Rec	Collection Date: 3/1           Matrix:         MEOH (SOIL)         Received Date: 3/1           Result         RL         Qual         Units         DF           ND         60         mg/Kg         20           E RANGE         120         4.7         mg/Kg         1           99.7         70-130         %Rec         1           GE ORGANICS         12         9.7         mg/Kg         1           107         70-130         %Rec         1           ORT LIST         ND         0.023         mg/Kg         1           0.39         0.047         mg/Kg         1           0.11         0.047         mg/Kg         1           2.8         0.093         mg/Kg         1           97.9         70-130         %Rec         1	Collection Date: 3/14/2019 4:00:00 PM           Matrix:         MEOH (SOIL)         Received Date: 3/16/2019 10:50:00 AM           Result         RL         Qual         Units         DF         Date Analyzed           ND         60         mg/Kg         20         3/18/2019 8:27:38 PM         Analyst:           ND         60         mg/Kg         1         3/18/2019 8:27:38 PM         Analyst:           120         4.7         mg/Kg         1         3/18/2019 8:17:45 PM         Analyst:           99.7         70-130         %Rec         1         3/18/2019 8:17:45 PM         Analyst:           GE ORGANICS         Analyst:         Analyst:         Analyst:         Analyst:           12         9.7         mg/Kg         1         3/19/2019 11:37:30 AM         Analyst:           GE ORGANICS         Analyst:         Analyst:         Analyst:         Analyst:           107         70-130         %Rec         1         3/19/2019 11:37:30 AM           ND         0.023         mg/Kg         1         3/19/2019 11:37:30 AM           0.7         70-130         %Rec         1         3/18/2019 8:17:45 PM           0.39         0.047         mg/Kg         3/18/2019 8:17					

### Hall Environmental Analysis Laboratory, Inc.

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

Qualifiers:

\*

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

PQL Practical Quanitative Limit

- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- E Value above quantitation range
- Analyte detected below quantitation limits Page 11 of 16 J
- P Sample pH Not In Range
- RL Reporting Detection Limit
- Sample container temperature is out of limit as specified W

Lab Order 1903784

**Analytical Report** 

Date Reported: 3/21/2019

	ITall Elivitolimental Analysis Eaboratory, me. Date Reported. 5/21/2019											
CLIENT:	: Harvest		Client Sample ID: BH06 @ 14'									
Project:	Trunk L Delineation		Collection Date: 3/14/2019 4:30:00 PM									
Lab ID:	1903784-012	Matrix:	MEOH (SO	IL)	Receiv	ved Dat	<b>e:</b> 3/1	6/2019 10:50:00 AM				
Analyses	S	Re	sult	RL	Qual	Units	DF	Date Analyzed	Batch			
EPA ME	THOD 300.0: ANIONS							Analyst:	MRA			
Chloride	9		ND	60		mg/Kg	20	3/18/2019 8:40:02 PM	43728			
EPA ME	THOD 8015D MOD: GASOLI	NE RANGE						Analyst:	RAA			
Gasoline	e Range Organics (GRO)		ND	3.2		mg/Kg	1	3/18/2019 8:46:11 PM	G58448			
Surr: BFB			101 7	70-130		%Rec	1	3/18/2019 8:46:11 PM	G58448			
EPA ME	THOD 8015M/D: DIESEL RAM	NGE ORGANIC	5					Analyst:	CLP			
Diesel R	Range Organics (DRO)		ND	9.8		mg/Kg	1	3/19/2019 12:01:30 PM	43721			
Motor O	Il Range Organics (MRO)		ND	49		mg/Kg	1	3/19/2019 12:01:30 PM	43721			
Surr:	DNOP		98.5 7	70-130		%Rec	1	3/19/2019 12:01:30 PM	43721			
EPA ME	THOD 8260B: VOLATILES SI	HORT LIST						Analyst	RAA			
Benzene	e		ND	0.016		mg/Kg	1	3/18/2019 8:46:11 PM	SLS584			
Toluene	2	C	0.061	0.032		mg/Kg	1	3/18/2019 8:46:11 PM	SLS584			
Ethylber	nzene		ND	0.032		mg/Kg	1	3/18/2019 8:46:11 PM	SLS584			
Xylenes	, Total		ND	0.064		mg/Kg	1	3/18/2019 8:46:11 PM	SLS584			
Surr:	4-Bromofluorobenzene		100 7	70-130		%Rec	1	3/18/2019 8:46:11 PM	SLS584			
Surr:	Toluene-d8		92.9 7	70-130		%Rec	1	3/18/2019 8:46:11 PM	SLS584			

Value exceeds Maximum Contaminant Level. В Qualifiers: \* E Value above quantitation range D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- Analyte detected in the associated Method Blank
- Analyte detected below quantitation limits Page 12 of 16 J
- Р Sample pH Not In Range
- RL Reporting Detection Limit

Sample container temperature is out of limit as specified W

Hall Environmental Analysis Laboratory, Inc.

**Analytical Report** Lab Order 1903784 Date Reported: 3/21/2019

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Harvest

Project: Trunk L Delineation

Sample ID: MD 42729	SampType: mblk TestCode: EPA Method						300.0: Anion	S		
Sample ID: MB-43728	Sampry	pe. mon	<b>`</b>				000.0.7411011			
Client ID: PBS	Batch	ID: 4372	28	F	RunNo: 58	3434				
Prep Date: 3/18/2019	Analysis Da	ate: 3/18	3/2019	S	SeqNo: 19	961763	Units: mg/K	g		
Analyte	Result	PQL S	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sample ID: LCS-43728	SampTy	/pe: Ics		Tes	tCode: EF	PA Method	300.0: Anion	s		
Sample ID: LCS-43728 Client ID: LCSS		/pe: <b>Ics</b> ID: <b>4372</b>	28		tCode: EF		300.0: Anion	S		
		ID: 4372		F		8434	300.0: Anion Units: mg/K			
Client ID: LCSS	Batch	ID: <b>4372</b> ate: <b>3/18</b>	3/2019	F	RunNo: 58	8434			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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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WO#: 1903784 21-Mar-19

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Harvest

Project: Trunk L Delineation

Sample ID: LCS-43721	SampType: LCS	8015M/D: Diesel Range	Organics	
Client ID: LCSS	Batch ID: 43721	RunNo: 58453		
Prep Date: 3/18/2019	Analysis Date: 3/19/2019	SeqNo: 1961839	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		124	
Surr: DNOP	5.8 5.000	115 70	130	
Sample ID: MB-43721	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 43721	RunNo: 58453		
Prep Date: 3/18/2019	Analysis Date: 3/19/2019	SeqNo: 1961840	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	114 70	130	
Sample ID: MB-43742	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 43742	RunNo: 58454		
Prep Date: 3/18/2019	Analysis Date: 3/19/2019	SeqNo: 1963736	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	10 10.00	101 70	130	
Sample ID: LCS-43742	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: LCSS	Batch ID: 43742	RunNo: 58454		
Prep Date: 3/18/2019	Analysis Date: 3/19/2019	SeqNo: 1963737	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.8 5.000	95.1 70	130	

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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WO#: 1903784 21-Mar-19

WO#: 1903784

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21-Mar-19

Client: Harvest

**Project:** 

Trunk L Delineation

0										
Sample ID: 100ng Ics	SampT	ype: LC	S	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batch	h ID: SL	S58448	RunNo: 58448						
Prep Date:	Analysis D	Date: 3/	18/2019	S	SeqNo: 1	961815	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.6	70	130			
Toluene	0.94	0.050	1.000	0	94.4	70	130			
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.2	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.8	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.6	70	130			
Surr: Toluene-d8	0.50		0.5000		99.0	70	130		<i>T</i>	
Sample ID: rb	SampT	Гуре: МЕ	3LK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batc	h ID: SL	S58448	F	RunNo: 5	8448				
Prep Date:	Analysis E	Date: 3/	18/2019	5	SeqNo: 1	961816	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.6	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		88.1	70	130			
Surr: Toluene-d8	0.50		0.5000		101	70	130			

Qualifiers:

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

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client:

Project: Trunk L Delineation

Harvest

Sample ID: 1903784-001ams	SampT	ype: MS	i	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: BH02 @ 0.5'	Batch	ID: <b>G5</b>	8448	F	anNo: 5	8448				
Prep Date:	Analysis D	ate: 3/	19/2019	S	SeqNo: 1	961600	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.4	21.76	0	88.6	68.2	135			
Surr: BFB	450		435.2		103	70	130			
Sample ID: 1903784-001amsc	SampT	ype: MS	D	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: BH02 @ 0.5'	Batch	ID: G5	8448	F	RunNo: 5	8448				
Prep Date:	Analysis D	ate: 3/	19/2019	S	SeqNo: 1	961601	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.4	21.76	0	85.8	68.2	135	3.21	20	
Surr: BFB	440		435.2		101	70	130	0	0	
Sample ID: 2.5ug gro Ics	SampT	ype: LC	S	Tes	tCode: E	PA Method	8015D Mod:	Gasoline	Range	
Sample ID: 2.5ug gro Ics Client ID: LCSS		ype: LC			tCode: El RunNo: 5		8015D Mod:	Gasoline	Range	
		1D: G5	8448	F		8448	8015D Mod: Units: mg/ł		Range	
Client ID: LCSS	Batch	1D: G5	8448 18/2019	F	RunNo: <b>5</b> SeqNo: <b>1</b>	8448			Range RPDLimit	Qual
Client ID: LCSS Prep Date:	Batch Analysis D	n ID: G5 ate: 3/	8448 18/2019	F	RunNo: <b>5</b> SeqNo: <b>1</b>	8448 961613 LowLimit 70	Units: <b>mg/k</b> HighLimit 130	(g		Qual
Client ID: LCSS Prep Date: Analyte	Batch Analysis D Result	n ID: G5 pate: 3/	8448 18/2019 SPK value	F S SPK Ref Val	RunNo: <b>5</b> SeqNo: <b>1</b> %REC	8448 961613 LowLimit	Units: <b>mg/ł</b> HighLimit	(g		Qual
Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO)	Batch Analysis D Result 23 510	n ID: G5 pate: 3/	8448 18/2019 SPK value 25.00 500.0	F S SPK Ref Val 0	RunNo: <b>5</b> SeqNo: <b>1</b> %REC 92.6 101	8448 961613 LowLimit 70 70	Units: <b>mg/k</b> HighLimit 130	<b>⟨g</b> %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB	Batch Analysis D Result 23 510 SampT	n ID: G5 pate: 3/ PQL 5.0	8448 18/2019 SPK value 25.00 500.0 BLK	F SPK Ref Val 0 Tes	RunNo: <b>5</b> SeqNo: <b>1</b> %REC 92.6 101	8448 961613 LowLimit 70 70 PA Method	Units: <b>mg/k</b> HighLimit 130 130	<b>⟨g</b> %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: rb	Batch Analysis D Result 23 510 SampT	PQL 5.0 7ype: ME	8448 18/2019 25.00 500.0 3LK 88448	F S SPK Ref Val 0 Tes F	RunNo: <b>5</b> GeqNo: <b>1</b> %REC 92.6 101 tCode: <b>E</b>	8448 961613 20 70 70 PA Method 8448	Units: <b>mg/k</b> HighLimit 130 130	(g %RPD Gasoline	RPDLimit	Qual
Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: rb Client ID: PBS	Batch Analysis D Result 23 510 SampT Batch	PQL 5.0 7ype: ME	8448 18/2019 SPK value 25.00 500.0 3LK 8448 18/2019	F S SPK Ref Val 0 Tes F	RunNo: <b>5</b> SeqNo: <b>1</b> %REC 92.6 101 tCode: <b>E</b> RunNo: <b>5</b> SeqNo: <b>1</b>	8448 961613 70 70 PA Method 8448 961614	Units: mg/ł HighLimit 130 130 8015D Mod:	(g %RPD Gasoline	RPDLimit	Qual
Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: rb Client ID: PBS Prep Date:	Batch Analysis D Result 23 510 SampT Batch Analysis D	n ID:       G5         pate:       3/         PQL       5.0         Type:       ME         n ID:       G5         n ID:       G5         n ID:       G5         n ID:       G5         n ID:       G5	8448 18/2019 SPK value 25.00 500.0 3LK 8448 18/2019	F SPK Ref Val 0 Tes F	RunNo: <b>5</b> SeqNo: <b>1</b> %REC 92.6 101 tCode: <b>E</b> RunNo: <b>5</b> SeqNo: <b>1</b>	8448 961613 70 70 PA Method 8448 961614	Units: mg/k HighLimit 130 130 8015D Mod: Units: mg/k	(g %RPD Gasoline (g	RPDLimit Range	

#### Qualifiers:

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

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WO#: **1903784** 

21-Mar-19

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Alb TEL: 505-345-3975 Website: www.ho	4901 Hawkin uquerque, NM 8 5 FAX: 505-345-	7109 <b>Sam</b> 4107	ple Log-In C	heck List
Client Name: Harvest	Work Order Number	: 1903784		RcptNo:	1
Received By: Erin Melendrez Completed By: Erin Melendrez Reviewed By:	3/16/2019 10:50:00 Al 3/16/2019 12:29:15 Pi 3/16/(9		What	<del>,</del>	
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	s?	Yes 🗹	No 🗌		
4. Were all samples received at a temperatu	re 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 tes	t(s)?	Yes 🗹	No 🗆		
7. Are samples (except VOA and ONG) prop		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 bro	ken?	Yes	No 🗹	# of proposid	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗔		>12 unless noted)
12. Are matrices correctly identified on Chain	of Custody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗹	No 🗌	Checked by:	
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 💌			
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	th this order?	Yes	No 🗌	NA 🗹	
Person Notified: By Whom: Regarding: Client Instructions:	Date:	eMail 🗌	Phone 🗍 Fax	In Person	
17. Cooler Information	Seal Intact Seal No Yes	Seal Date	Signed By		

Page 1 of 1

Cham-or-oustouy Record	Turn-Around Time: Not Day 3)19	
Client: Harvest Midstream	🗆 Standard 🖾 Rush	ANALYSIS LABORATOR
	Project Name:	www.hallenvironmental.com
Mailing Address: 1775 Avrayo Drive	Trunk L Delineation	4901 Hawkins NE - Albuquerque, NM 87109
	Project #:	Tel. 505-345-3975 Fax 505-345-4107
Phone #: 505-632-4415	09319022	Analysis Request
	Project Manager:	ent) 804
QA/QC Package:	Kijun Hong	<u>'s (8021)</u> (0 / MRO) PCB's DSIMS DSIMS DSIMS
B Standard □ Level 4 (Full Validation)	+ ) )	7 DRO / MF / DRO / MF 8082 PCB's 8270SIMS 8270SIMS 0 ) ( esent/Abse
	Sampler: EVIC Carroll / Mary Marm	TMB 1 DR 8082 8082 14.1) 102,
	#of Coolers:	TBE / TBE / reides/ nod 56 nod
		BTEX /- <del>MTBE / TMR's (8021)</del> TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's EDB (Method 504.1) PAHs by 8310 or 8270SIMS RCRA 8 Metals CJ F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> S260 (VOA) 8270 (Semi-VOA) Total Coliform (Present/Absent)
	Container Preservative CHEAL No.	3 (M 48 0 (S × 1 + 80
	Type and # Type	BTEX TPH:80 8081 F 8081 F 8081 F 8081 F F AHS PAHS 8260 ( Total C
3/13/19 11:30 Soil St BHOZ @ 0.51	1 402 000 -001	XXXX
1200 BH02@15'	1 -002	XX
1306 BHD3@ 0.51	-003	XXXXX
1350 BHO3 @ 15'	-004	XX X X
1120 RH04 @ 41	-005	XXXXXXX
1140 BH04 @ 151	-000	XXXXX
1330 BHO5@Lel	-007	
V. 1400 BHO5@15'	-008	X X X X X
3H119 1320 BHOLE6'	-009	
1 1440 BHOL @20	-010	XXX X
11000 BHO6 @6'	1 -011	
V 1630 V BHOLO @14.	N/12 -012	
Date: Time: Relinquished by:	Received by: Via: Date Time	Please CC: bherb@ltenv.com
3/15/19 9:00 may might	1 Th	
Date: Time: Refinquisited by:		ecarroll@Henv.com
	/ Mrst Valt 3/15/19 155	

#### HALL ENVIRONMENTAL ANALYSIS LABORATORY

April 16, 2019

Kijun Hong Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475 FAX

RE: Trunk L

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

OrderNo.: 1904418

Dear Kijun Hong:

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

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Er	nvironmental Analy	ysis Laboratory, I	nc.				Date Reported: 4/16/201	19
CLIENT: Project:	Harvest Trunk L				·		I-7 @ 8-10' 26/2019 1:40:00 PM	
Lab ID:	1904418-001	Matrix: SOIL		Receiv	ved Dat	e: 4/6	5/2019 10:45:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS						Analyst	MRA
Chloride		120	60		mg/Kg	20	4/11/2019 1:28:01 PM	44293
EPA MET	HOD 8015D MOD: GASOL	INE RANGE					Analyst	RAA
Gasoline	Range Organics (GRO)	1000	23	Н	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Surr: E	BFB	104	70-130	Н	%Rec	5	4/12/2019 9:28:12 AM	44226
EPA MET	HOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	: Irm
Diesel R	ange Organics (DRO)	310	10		mg/Kg	1	4/11/2019 10:45:43 AM	44222
Motor Oi	Range Organics (MRO)	ND	50		mg/Kg	1	4/11/2019 10:45:43 AM	44222
Surr: I	DNOP	110	70-130		%Rec	1	4/11/2019 10:45:43 AM	44222
EPA MET	THOD 8260B: VOLATILES S	SHORT LIST					Analyst	RAA
Benzene	3	ND	0.12	Н	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Toluene		4.3	0.23	Н	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Ethylben	izene	1.5	0.23	Н	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Xylenes,	Total	25	0.46	Н	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Surr:	1,2-Dichloroethane-d4	87.2	70-130	Н	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr: 4	4-Bromofluorobenzene	98.7	70-130	Н	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr: I	Dibromofluoromethane	118	70-130	Н	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr:	Toluene-d8	96.7	70-130	Н	%Rec	5	4/12/2019 9:28:12 AM	44226

Qualifiers:

E

W

.....

Value above quantitation range ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

Sample container temperature is out of limit as specified at testcode

Н Holding times for preparation or analysis exceeded Practical Quanitative Limit PQL

% Recovery outside of range due to dilution or matrix S

**Analytical Report** Lab Order 1904418

Page 1 of 5

Client: Harvest Project: Trunk L

Sample ID MB-44293	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 44293	RunNo: 59095		
Prep Date: 4/11/2019	Analysis Date: 4/11/2019	SeqNo: 1989134	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-44293	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Sample ID LCS-44293 Client ID: LCSS	SampType: Ics Batch ID: 44293	TestCode: EPA Method RunNo: 59095	300.0: Anions	
	1 31		300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: <b>44293</b> Analysis Date: <b>4/11/2019</b>	RunNo: <b>59095</b>		RPDLimit Qual

Qualifiers:

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

S % Recovery outside of range due to dilution or matrix

Page 2 of 5

Harvest **Client: Project:** 

Trunk L

3				
Sample ID MB-44222	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 44222	RunNo: 59043	3	
Prep Date: 4/9/2019	Analysis Date: 4/10/2019	SeqNo: 1987392	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	9.5 10.00	94.9 70	130	
Sample ID LCS-44222	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 44222	RunNo: 59043		
Prep Date: 4/9/2019	Analysis Date: 4/10/2019	SeqNo: 1987409	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 63.9	124	
Surr: DNOP	4.9 5.000	98.3 70	130	
Sample ID MB-44276	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: PBS	Batch ID: 44276	RunNo: 59065		
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988005	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	11 10.00	109 70	130	
Sample ID LCS-44276	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 44276	RunNo: 59065		
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988539	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.7 5.000	94.5 70	130	
Sample ID LCS-44265	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 44265	RunNo: <b>59065</b>		
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988542	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.6 5.000	91.2 70	130	
Sample ID MB-44265	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range	e Organics
Client ID: PBS	Batch ID: 44265	RunNo: 59065		
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988543	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	9.6 10.00	95.5 70	130	

#### Qualifiers:

- Value above quantitation range E
- ND Not Detected at the Reporting Limit

RL Reporting Detection Limit Sample container temperature is out of limit as specified at testcode W

Н Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

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WO#: 1904418

**Client:** Harvest **Project:** 

Trunk L

Sample ID Ics-44226	SampT	ype: LC	S	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batch	h ID: 442	226	R	RunNo: 5	9108				
Prep Date: 4/9/2019	Analysis D	Date: 4/	11/2019	S	SeqNo: 19	989810	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	1.000	0	80.2	70	130			
Toluene	0.97	0.050	1.000	0	96.9	70	130			
Ethylbenzene	0.98	0.050	1.000	0	97.9	70	130			
Xylenes, Total	2.9	0.10	3.000	0	98.2	70	130			
Surr: 1,2-Dichloroethane-d4	0.42		0.5000		83.3	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.8	70	130			
Surr: Dibromofluoromethane	0.45		0.5000		89.9	70	130			
Surr: Toluene-d8	0.46		0.5000		92.9	70	130			
Sample ID mb-44226	SampT	Гуре: МЕ	3LK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Sample ID mb-44226 Client ID: PBS		Гуре: <b>МЕ</b> h ID: <b>44</b> ;			tCode: El RunNo: 5		8260B: Volat	iles Short	List	
		h ID: 44	226	F		9108	8260B: Volat Units: mg/K		t List	
Client ID: PBS	Batc	h ID: 44	226 11/2019	F	RunNo: 5	9108			t <b>List</b> RPDLimit	Qual
Client ID: PBS Prep Date: 4/9/2019	Batcl Analysis E	h ID: 44: Date: 4/	226 11/2019	F	RunNo: 5 SeqNo: 1	9108 989811	Units: mg/K	ſg		Qual
Client ID: PBS Prep Date: 4/9/2019 Analyte	Batcl Analysis D Result	h ID: 44 Date: 4/ PQL	226 11/2019	F	RunNo: 5 SeqNo: 1	9108 989811	Units: mg/K	ſg		Qual
Client ID: PBS Prep Date: 4/9/2019 Analyte Benzene	Batcl Analysis E Result ND	h ID: 44: Date: 4/ PQL 0.025	226 11/2019	F	RunNo: 5 SeqNo: 1	9108 989811	Units: mg/K	ſg		Qual
Client ID: PBS Prep Date: 4/9/2019 Analyte Benzene Toluene	Batcl Analysis E Result ND ND	h ID: 44; Date: 4/ PQL 0.025 0.050	226 11/2019	F	RunNo: 5 SeqNo: 1	9108 989811	Units: mg/K HighLimit	ſg		Qual
Client ID: <b>PBS</b> Prep Date: <b>4/9/2019</b> Analyte Benzene Toluene Ethylbenzene	Batch Analysis E Result ND ND ND	h ID: 44: Date: 4/ PQL 0.025 0.050 0.050	226 11/2019	F	RunNo: 5 SeqNo: 1	9108 989811	Units: mg/K	ſg		Qual
Client ID: <b>PBS</b> Prep Date: <b>4/9/2019</b> Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Batch Analysis E Result ND ND ND ND	h ID: 44: Date: 4/ PQL 0.025 0.050 0.050	226 11/2019 SPK value	F	RunNo: 5 SeqNo: 1 %REC	9108 989811 LowLimit	Units: mg/K HighLimit 130 130	ſg		Qual
Client ID: <b>PBS</b> Prep Date: <b>4/9/2019</b> Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4	Batcl Analysis E Result ND ND ND ND 0.42	h ID: 44: Date: 4/ PQL 0.025 0.050 0.050	226 11/2019 SPK value 0.5000	F	RunNo: <b>5</b> SeqNo: <b>1</b> %REC 83.9	9108 989811 LowLimit 70	Units: <b>mg/K</b> HighLimit 130 130 130	ſg		Qual
Client ID: <b>PBS</b> Prep Date: <b>4/9/2019</b> Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene	Batcl Analysis D Result ND ND ND ND 0.42 0.49	h ID: 44: Date: 4/ PQL 0.025 0.050 0.050	226 11/2019 SPK value 0.5000 0.5000	F	RunNo: 5 SeqNo: 1 %REC 83.9 97.9	9108 989811 LowLimit 70 70	Units: mg/K HighLimit 130 130	ſg		Qual

#### Qualifiers:

Value above quantitation range E

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL Sample container temperature is out of limit as specified at testcode W

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

Page 4 of 5

WO#: 1904418

Client: Harvest Project: Trunk L

Sample ID Ics-44226	SampT	ype: LC	S	Tes	TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: LCSS	Batch	D: 44	226	RunNo: 59108						
Prep Date: 4/9/2019	Analysis D	ate: 4/	11/2019	S	SeqNo: 1	989690	Units: mg/K	g		
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	70	130			
0 0 1					100	70	400			
Surr: BFB	520		500.0		103	70	130			
Surr: BFB		ype: ME		Tes			8015D Mod:	Gasoline	Range	
	SampT	ype: ME	BLK			PA Method		Gasoline	Range	
Sample ID mb-44226	SampT	n ID: 44	3LK 226	F	tCode: El	PA Method 9108			Range	
Sample ID <b>mb-44226</b> Client ID: <b>PBS</b>	SampT Batch	n ID: 44	3LK 226 11/2019	F	tCode: El	PA Method 9108	8015D Mod:		Range RPDLimit	Qual
Sample ID mb-44226 Client ID: PBS Prep Date: 4/9/2019	SampT Batch Analysis D	n ID: 44: pate: 4/	3LK 226 11/2019	F	tCode: El RunNo: 5 SeqNo: 1	PA Method 9108 989692	8015D Mod: Units: mg/K	g		Qual

Qualifiers:

- E Value above quantitation range
- ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

- W Sample container temperature is out of limit as specified at testcode
- H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

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WO#: **1904418** 

	RONMENT YSIS RATORY	AL			490 Ibuquerq 75 FAX:	1 Haw ue, NA 505-34	45-4107	Sar	nple Lo	og-In C	he	ck List
Client Name:	Harvest		Work	Order Numb	er: 1904	418				ReptNo:	1	
Received By:	Isaiah Orl	liz	4/6/2019	10:45:00 A	м			INC	2×			
Completed By:	Isaiah Orl		4/6/2019	11:44:23 A	м			Inc	21			
Reviewed By:	YGY	18/10										
(13)	,								Label	it. :	C	4-8-19
Chain of Cu	stody											
1. Is Chain of C		lete?			Yes	V		No 🗌	Not Pr	esent 🗌		
2. How was the	sample deliv	ered?			Cou	ier						
Log In 3. Was an atter	mpt made to o	cool the samp	es?		Yes	V		No 🗆				
4. Were all sam	ples received	at a tempera	ture of >0° C t	o 6.0°C	Yes	V		No 🗆				
5. Sample(s) in	proper conta	iner(s)?			Yes	V		No 🗌				
6. Sufficient sar	nole volume f	or indicated te	set(s)?		Yes	V		No 🗌				
7. Are samples			-	d?		V		No 🗌				
8. Was preserva			peny preserve					No 🗹		NA		
						_						
9. VOA vials ha		12.9			Yes			No 🗌	No VOA	Vials M		
10. Were any sa	mple containe	ers received b	roken?		Yes			No 🗹	# of press bottles st			
11. Does paperw (Note discrep		ttle labels? ain of custody	1		Yes	V		No 🗌	for pH:		>12 0	nless noted)
12, Are matrices	correctly iden	tified on Chair	n of Custody?		Yes			No 🗌	Adj	usted?		10.0
13. Is it clear what			?			~		No			ú	5 10
14. Were all hold (If no, notify c		to be met? uthorization.)			Yes	V		No	Che	cked by:	4	-8-19
Special Hand	ling (if app	olicable)										
15. Was client n	otified of all d	screpancies v	with this order?		Yes			No 🗌		NA 🗹		
Persor	Notified:			Date:								
By Wh	om:	[		Via:	eM	all 🗌	Phone	e 🗌 Fax	In Pers	ion		
Regard Client	ling: Instructions:											
16. Additional re											1	
17. Cooler Info	rmation											
Cooler N	States and States	Condition	Seal Intact	Seal No	Seal D	ate	Sig	ned By				
1	5.9	Good	Yes	Contraction Contraction Contraction								
2	3.2	Good	Yes									
3	2.8	Good	Yes									

Page 1 of 1

ter.

🛛 Standard 🗆 Rush	HALL ENVIRONMENTAL ANALYSIS LABORATORY							
	www.hallenvironmental.com							
IVanis L	4901 Hawkins NE - Albuquerque, NM 87109							
Project #:	Tel. 505-345-3975 Fax 505-345-4107							
090319022	Analysis Request							
Project Manager:								
Brooke Herb-LTE	(bse 0.41 C B)							
Sampler: Josh Adams								
and the second								
Cooler Templinclucing CFI: 59° 37° 2	MHB MHB MHB MHB MHB MHB MHB MHB MHB MHB							
Container Preservative HEAL No.	BTEX): MTBE / TMB: (8021)       TPH:8015D(GR0 / DR0 / MR0)       8081 Pesticides/8082 PCB's       EDB (Method 504.1)       PAHs by 8310 cr 8270SIMS       RCRA 8 Metals       CU; F., Br., NO <sub>31</sub> , NO <sub>24</sub> , PO <sub>44</sub> , SO <sub>4</sub> 8250 (VOA)       8270 (Semi-VOA)       Total Coliform (Present/Absent)							
	XXXX							
Received by: Via: Date Time ////////////////////////////////////	ecarroll@ltenv.com							
	Project Name:         Dr.       TFUINK       L         13       Project Manager: $090319022$ c. com       Project Manager: $Brooke Harb-LTE$ Kijum Hong-Harvese       Sampler: Josh Adams         On Ice:       Isreeives       INO         # of Coolers:       3         Cooler Tempinchuling crit       5.97, 3.2       2.9         Container       Preservative       HEAL No.         Type and #       Type       190.44118         Sample:       I) 4 22       Cool       -000 (         Sample:       II) 4 22       Cool       -000 (         Sample:       III) 4 22       Cool       -000 (         Sample:       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII							

### HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 29, 2019

Kijun Hong Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475 FAX:

RE: Trunk L

OrderNo.: 1903D34

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysi	s Laboratory, l	nc.			Date Reported: 3/29/201	9				
CLIENT: Harvest Project: Trunk L	Client Sample ID: BH07 @ 40' Collection Date: 3/27/2019 11:30:00 AM									
Lab ID: 1903D34-001	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 3/2	28/2019 7:00:00 AM					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analyst:	CJS				
Chloride	95	60	mg/Kg	20	3/28/2019 11:39:03 AM	43933				
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst:	RAA				
Gasoline Range Organics (GRO)	230	19	mg/Kg	5	3/28/2019 8:58:52 AM	43853				
Surr: BFB	106	70-130	%Rec	5	3/28/2019 8:58:52 AM	43853				
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst:	Irm				
Diesel Range Organics (DRO)	86	9.5	mg/Kg	1	3/28/2019 9:43:19 AM	43929				
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	3/28/2019 9:43:19 AM	43929				
Surr: DNOP	94.0	70-130	%Rec	1	3/28/2019 9:43:19 AM	43929				
EPA METHOD 8260B: VOLATILES SHO	ORT LIST				Analyst:	RAA				
Benzene	ND	0.095	mg/Kg	5	3/28/2019 8:58:52 AM	43853				
Toluene	1.4	0.19	mg/Kg	5	3/28/2019 8:58:52 AM	43853				
Ethylbenzene	0.21	0.19	mg/Kg	5	3/28/2019 8:58:52 AM	43853				
Xylenes, Total	3.6	0.38	mg/Kg	5	3/28/2019 8:58:52 AM	43853				
Surr: 1,2-Dichloroethane-d4	87.7	70-130	%Rec	5	3/28/2019 8:58:52 AM	43853				
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	5	3/28/2019 8:58:52 AM	43853				
Surr: Dibromofluoromethane	89.9	70-130	%Rec	5	3/28/2019 8:58:52 AM	43853				
Surr: Toluene-d8	90.6	70-130	%Rec	5	3/28/2019 8:58:52 AM	43853				

Qualifiers:

\*

- Value exceeds Maximum Contaminant Level. ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

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

Holding times for preparation or analysis exceeded н

PQL Practical Quanitative Limit S

% Recovery outside of range due to dilution or matrix

**Analytical Report** Lab Order 1903D34

Page 1 of 5

**Client:** Harvest Trunk L **Project:** 

Sample ID: MB-43933	SampType: mblk	TestCode: EPA Method	A Method 300.0: Anions					
Client ID: PBS	Batch ID: 43933	RunNo: 58732						
Prep Date: 3/28/2019	Analysis Date: 3/28/2019	SeqNo: 1973292	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual				
Chloride	ND 1.5							
Sample ID: LCS-43933	SampType: Ics	TestCode: EPA Method	300.0: Anions					
Client ID: LCSS	Batch ID: 43933	RunNo: 58732						
Prep Date: 3/28/2019	Analysis Date: 3/28/2019	SeqNo: 1973293	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual				

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit
- Reporting Detection Limit RL

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

- Н Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

Page 2 of 5

WO#: 1903D34

29-Mar-19

Client: Harvest Project: Trunk L

Sample ID: LCS-43929	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	sel Range Organics				
Client ID: LCSS	Batch	ID: 43	929	F	RunNo: 58701								
Prep Date: 3/28/2019	Analysis D	ate: 3/	28/2019	SeqNo: 1971593 Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	42	10	50.00	0	83.4	63.9	124						
Surr: DNOP	4.3		5.000		85.7	70	130						
Sample ID: MB-43929	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics				
Client ID: PBS	Batch	ID: 43	929	F	RunNo: 5	8701							
Prep Date: 3/28/2019	Analysis D	ate: 3/	28/2019	5	SeqNo: 1	971594	Units: mg/k	g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	ND	10											
Motor Oil Range Organics (MRO)	ND	50											
Surr: DNOP	9.3		10.00		93.3	70	130						

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

Page 3 of 5

1903D34 29-Mar-19

WO#:

-

**Client:** Harvest **Project:** Trunk L

Sample ID: Ics-43853 SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List Batch ID: 43853 RunNo: 58659 Client ID: LCSS Prep Date: 3/25/2019 Analysis Date: 3/27/2019 SeqNo: 1970988 Units: mg/Kg %RPD **RPDLimit** PQL SPK value SPK Ref Val %REC HighLimit Qual Result LowLimit Analyte 0.90 0.025 1.000 0 90.0 70 130 Benzene 70 0.94 0.050 1.000 0 93.7 130 Toluene 70 0.5000 85.1 130 Surr: 1,2-Dichloroethane-d4 0.43 Surr: 4-Bromofluorobenzene 0.53 0.5000 105 70 130 0.5000 87.0 70 130 Surr: Dibromofluoromethane 0.44 Surr: Toluene-d8 0.44 0.5000 88.6 70 130 Sample ID: mb-43853 SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List Batch ID: 43853 Client ID: PBS RunNo: 58659 Prep Date: 3/25/2019 Analysis Date: 3/27/2019 SeqNo: 1970989 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result PQL Qual Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10 70 130 0.42 0.5000 84.9 Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene 0.54 0.5000 108 70 130 0.44 0.5000 88.3 70 130 Surr: Dibromofluoromethane 87.9 0.5000 70 130 Surr: Toluene-d8 0.44

**Qualifiers:** 

Value exceeds Maximum Contaminant Level.

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified at testcode Н Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

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29-Mar-19

WO#: 1903D34

**Client:** Harvest **Project:** Trunk L

Sample ID: Ics-43853	SampT	ype: LC	S	Tes	tCode: EF	A Method	8015D Mod:	Gasoline I	soline Range				
Client ID: LCSS		1D: 438			RunNo: 5				5				
Prep Date: 3/25/2019	Analysis D	ate: 3/2	27/2019	5	SeqNo: 1970937 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.2	70	130						
Surr: BFB	540		500.0		108	70	130						
001. 51 5	540		500.0		100	70	100						
Sample ID: mb-43853		ype: MB		Tes			8015D Mod:	Gasoline I	Range				
	SampT	ype: ME	BLK			PA Method		Gasoline I	Range				
Sample ID: mb-43853	SampT	n ID: 438	BLK 853	F	tCode: EF	PA Method 8659			Range				
Sample ID: mb-43853 Client ID: PBS	SampT Batch	n ID: 438	BLK 853 27/2019	F	tCode: EF RunNo: 58 SeqNo: 19	PA Method 8659	8015D Mod:		Range	Qual			
Sample ID: <b>mb-43853</b> Client ID: <b>PBS</b> Prep Date: <b>3/25/2019</b>	SampT Batch Analysis D	n ID: 438 pate: 3/2	BLK 853 27/2019	F	tCode: EF RunNo: 58 SeqNo: 19	PA Method 8659 970938	8015D Mod: Units: mg/K	g		Qual			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level. \*
- ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

- Sample container temperature is out of limit as specified at testcode W
- Holding times for preparation or analysis exceeded H
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

Page 5 of 5

WO#: 1903D34

HALL ENVIRONMENTA ANALYSIS LABORATORY	AL	Hall Environmental . Albu TEL: 505-345-3975 Website: www.hai	490 querq FAX:	1 Hawkins N ue, NM 8710 505-345-410	TE 19 <b>S</b> 17	amp	ble Log-In C	heck List
Client Name: Harvest	Wo	ork Order Number:	1903	D34			RcptNo:	1
Received By: Anne Tho Completed By: Anne Tho		2019 7:00:00 AM 2019 7:43:17 AM			Annı . Annı	H-		
Reviewed By: IO Labyled by . A	3 28 03 28/19	114			Clark .	<i>,,,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Chain of Custody								
1. Is Chain of Custody comp	lete?		Yes	$\checkmark$	No		Not Present	
2. How was the sample deliv	ered?		Cour	ier				
Log In 3. Was an attempt made to c	cool the samples?		Yes	$\checkmark$	No			
4. Were all samples received	at a temperature of >0°	C to 6.0°C	Yes		No			
5. Sample(s) in proper contai	ner(s)?		Yes	V	No			
6. Sufficient sample volume for	or indicated test(s)?		Yes		No [			
7. Are samples (except VOA	and ONG) properly prese	rved?	Yes	$\checkmark$	No			
8. Was preservative added to	bottles?		Yes		No		NA 🗌	
9. VOA vials have zero heads	space?		Yes		No [		No VOA Vials 🗹	
10. Were any sample containe	ers received broken?		Yes		No	#	t of preserved	
11. Does paperwork match bot (Note discrepancies on cha			Yes		No [		or pH:	>12 unless noted)
12. Are matrices correctly iden	tified on Chain of Custody	y?	Yes	$\checkmark$	No [		Adjusted?	
13. Is it clear what analyses we	ere requested?		Yes	$\checkmark$	No [			
14. Were all holding times able (if no, notify customer for a			Yes	$\checkmark$	No [		Checked by:	
Special Handling (if app	licable)							
15. Was client notified of all di	screpancies with this ord	er?	Yes		No		NA 🗹	
Person Notified:		Date				į		
By Whom:		via:	eMa	ail 🗌 Pho	ne 🗌	Fax [	In Person	
Regarding:			<b></b>			Gilli iliiii GhasharisHik		1
Client Instructions:								}
16. Additional remarks:								
17. <u>Cooler Information</u> Cooler No Temp °C	Condition Seal Inta	ct Seal No S	eal Da	ie Si	gned B	Valua		
1 1.0	Good Yes				SAUGISTER	Alminini		

Page 1 of 1

C	hain	-of-Cu	ustody Record	Turn-Around	Time:	Scine Day	1													
Client:			Four Corners	□ Standard	e:	Scine Day 3/28/2019														
Mailing	Address	n Hon	19		NKL											tal.co	۰.			
	, laar oot			Project #:			-										M 87			
Dhana	<i>#. 07</i>	10,20	5-1096	-				Te	əl. 50	5-34	15-3				-	-345- uest	-4107			1000
			P. horvest. com	Project Mana	ager:		-	â						1313	Neg					
QA/QC	Package	:	V HOAVESU. COM		Hong - HO	rvest	021	MRC	3's		1S		SC.			sen				
🗹 Star			Level 4 (Full Validation)		Herb - LT		s (8	1/0	PCB's		<b>NISC</b>		PO			t/At			1	
Accred	itation:	□ Az Co	ompliance		Evic carrie		HIRE [	/ DR	082	<del>.</del> 1	8270SIMS		D3			eser				
			r	On Ice	Yes.	No		RO	es/8	504	J or	sli	19. P		(VO)	Pn (Pn				
EDD	) (Type)	<u> </u>	<u>F</u>		)(including CF); ///		HBH	D(G	ticid	thod	831(	Vleta	N	(A)	V-in	form				
			. ·	Container	Preservative	HEAL NO. 1903D34	BIEXY-MTBE/ TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310 or	<b>RCRA 8 Metals</b>	CI) F. Br, NO., NO., PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)				
	Time	Matrix	Sample Name	Type and # 1	Туре				80		P	Ř	1	82	82	Ĕ	-+	$\rightarrow$		+
3124/19	1130	Soil	BH07 @ 40'	1400	COOl	201	X	X					X					-	_	
				· · · ·															$\square$	+
									_											$\downarrow$
						E TATAL			_											
			-			1											$\square$			$\downarrow$
																		$\square$	· .	
Date:	Time:	Relinquish	nea by:	Received by:	Via:	Date Time	Ren	nark	s:											
Date:	1410 Time:	Relinquish	the Mul	Received by	Via:	2/27/19 1410 Date Time	-													
3/	1010	Alex		11.	6	03/23/19														
127 18	102	1/00	hat Walter	Ul	mo	6700														

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

April 12, 2019

Kijun Hong Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: FAX

RE: Trunk L

OrderNo.: 1904474

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/9/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis	Laboratory,	Inc.				Date Reported: 4/12/2019				
CLIENT: Harvest Project: Trunk L				-	ID: BH-8@30-32' ate: 4/8/2019 11:00:00 AM					
Lab ID: 1904474-001	Matrix: MEOH					4/9/2019 8:10:00 AM				
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS						Analyst	smb			
Chloride	ND	60		mg/Kg	20	4/9/2019 11:57:48 AM	44224			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	CLP			
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/10/2019 3:40:26 PM	44222			
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/10/2019 3:40:26 PM	44222			
Surr: DNOP	129	70-130		%Rec	1	4/10/2019 3:40:26 PM	44222			
EPA METHOD 8015D: GASOLINE RANGE	i i					Analyst	NSB			
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/9/2019 11:17:42 AM	G59017			
Surr: BFB	91.8	73.8-119		%Rec	1	4/9/2019 11:17:42 AM	G59017			
EPA METHOD 8021B: VOLATILES						Analyst	NSB			
Benzene	ND	0.020		mg/Kg	1	4/9/2019 11:17:42 AM	B59017			
Toluene	ND	0.040		mg/Kg	1	4/9/2019 11:17:42 AM	B59017			
Ethylbenzene	ND	0.040		mg/Kg	1	4/9/2019 11:17:42 AM	B59017			
Xylenes, Total	ND	0.080		mg/Kg	1	4/9/2019 11:17:42 AM	B59017			
Surr: 4-Bromofluorobenzene	92.1	80-120		%Rec	1	4/9/2019 11:17:42 AM	B59017			

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL

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

**Analytical Report** Lab Order 1904474

Page 1 of 10

Hall Environmental Analysis I	Laboratory,	[nc.				Date Reported: 4/12/201	19
CLIENT: Harvest Project: Trunk L Lab ID: 1904474-002	Client Sample ID: BH-8@40-42' Collection Date: 4/8/2019 11:30:00 AM Matrix: MEOH (SOIL) Received Date: 4/9/2019 8:10:00 AM						
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	ND	60		mg/Kg	20	Analyst: 4/9/2019 12:10:12 PM	smb 44224
EPA METHOD 8015M/D: DIESEL RANGE O	ORGANICS					Analyst	CLP
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	ND ND 123	9.8 49 70-130		mg/Kg mg/Kg %Rec	1 1 1	4/10/2019 4:04:33 PM 4/10/2019 4:04:33 PM 4/10/2019 4:04:33 PM	44222 44222 44222
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO) Surr: BFB	ND 86.3	3.8 73.8-119		mg/Kg %Rec	1 1	4/9/2019 12:27:59 PM 4/9/2019 12:27:59 PM	G59017 G59017
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	ND ND ND 86.8	0.019 0.038 0.038 0.075 80-120		mg/Kg mg/Kg mg/Kg mg/Kg %Rec	1 1 1 1	4/9/2019 12:27:59 PM 4/9/2019 12:27:59 PM 4/9/2019 12:27:59 PM 4/9/2019 12:27:59 PM 4/9/2019 12:27:59 PM	B59017 B59017 B59017 B59017 B59017

Qualifiers:

Н Holding times for preparation or analysis exceeded Practical Quanitative Limit

PQL % Recovery outside of range due to dilution or matrix S

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL

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

**Analytical Report** Lab Order 1904474

Page 2 of 10

Hall Environmental Analysis	Laboratory	, Inc.			it.	Date Reported: 4/12/20	19
CLIENT: Harvest Project: Trunk L Lab ID: 1904474-003	Client Sample ID: BH-9@27-30'           Collection Date: 4/8/2019 2:30:00 PM           Matrix: MEOH (SOIL)         Received Date: 4/9/2019 8:10:00 AM						1
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	smb
Chloride	ND	59		mg/Kg	20	4/9/2019 12:22:36 PM	44224
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/10/2019 4:14:28 PM	44222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/10/2019 4:14:28 PM	44222
Surr: DNOP	117	70-130		%Rec	1	4/10/2019 4:14:28 PM	44222
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	4/9/2019 1:38:08 PM	G59017
Surr: BFB	86.8	73.8-119		%Rec	1	4/9/2019 1:38:08 PM	G59017
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.019		mg/Kg	1	4/9/2019 1:38:08 PM	B59017
Toluene	ND	0.039		mg/Kg	1	4/9/2019 1:38:08 PM	B59017
Ethylbenzene	ND	0.039		mg/Kg	1	4/9/2019 1:38:08 PM	B59017
Xylenes, Total	ND	0.078		mg/Kg	1	4/9/2019 1:38:08 PM	B59017
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	4/9/2019 1:38:08 PM	B59017

Qualifiers:

H Holding times for preparation or analysis exceeded PQL Practical Quantative Limit S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

**Analytical Report** Lab Order 1904474

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Hall Environmental Analysis	Laboratory,	Inc.				Date Reported: 4/12/201	19
CLIENT: Harvest Project: Trunk L Lab ID: 1904474-004	Matrix: MEOH		Collect	mple II ion Dat ved Dat	<b>e:</b> 4/8		
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS Chloride	ND	60		mg/Kg	20	Analyst: 4/9/2019 12:35:01 PM	smb 44224
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst	Irm
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/10/2019 4:38:59 PM	44222
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/10/2019 4:38:59 PM	44222
Surr: DNOP	100	70-130		%Rec	1	4/10/2019 4:38:59 PM	44222
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	4/9/2019 2:01:32 PM	G59017
Surr: BFB	88.8	73.8-119		%Rec	1	4/9/2019 2:01:32 PM	G59017
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.023		mg/Kg	1	4/9/2019 2:01:32 PM	B59017
Toluene	ND	0.045		mg/Kg	1	4/9/2019 2:01:32 PM	B59017
Ethylbenzene	ND	0.045		mg/Kg	1	4/9/2019 2:01:32 PM	B59017
Xylenes, Total	ND	0.091		mg/Kg	1	4/9/2019 2:01:32 PM	B59017
Surr: 4-Bromofluorobenzene	88.9	80-120		%Rec	1	4/9/2019 2:01:32 PM	B59017

Qualifiers:

 H
 Holding times for preparation or analysis exceeded

 PQL
 Practical Quanitative Limit

 S
 % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

**Analytical Report** Lab Order 1904474

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# **QC SUMMARY REPORT**

Hall Environmental Analysis Laboratory, Inc.

Harvest **Client:** 

Sample ID: MB-44224 SampType: MBLK TestCode: EPA Method 300.0: Anions Batch ID: 44224 RunNo: 59030 Client ID: PBS Analysis Date: 4/9/2019 SeqNo: 1986298 Units: mg/Kg Prep Date: 4/9/2019 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Analyte ND Chloride 1.5 Sample ID: LCS-44224 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 44224 RunNo: 59030 Analysis Date: 4/9/2019 SeqNo: 1986300 Units: mg/Kg Prep Date: 4/9/2019 PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result HighLimit Qual Chloride 14 1.5 15.00 0 96.2 90 110

#### Qualifiers:

- Holding times for preparation or analysis exceeded H
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL

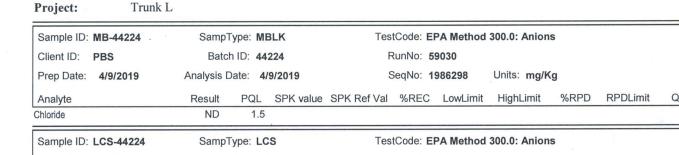
Sample container temperature is out of limit as specified at testcode W

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1904474

12-Apr-19

WO#:



WO#:

12-Apr-19

**Client:** Harvest **Project:** Trunk L

Froject: ITuik I			
Sample ID: MB-44222	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 44222	RunNo: 59043	
Prep Date: 4/9/2019	Analysis Date: 4/10/2019	SeqNo: 1987392	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	9.5 10.00	94.9 70	130
Sample ID: LCS-44222	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 44222	RunNo: 59043	
Prep Date: 4/9/2019	Analysis Date: 4/10/2019	SeqNo: 1987409	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 63.9	. 124
Surr: DNOP	4.9 5.000	98.3 70	130
Sample ID: MB-44276	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 44276	RunNo: 59065	
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988005	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	109 70	130
Sample ID: LCS-44276	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 44276	RunNo: 59065	
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988539	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	94.5 70	130
Sample ID: LCS-44265	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 44265	RunNo: 59065	
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988542	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.6 5.000	91.2 70	130
Sample ID: MB-44265	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 44265	RunNo: 59065	
Prep Date: 4/10/2019	Analysis Date: 4/11/2019	SeqNo: 1988543	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	9.6 10.00	95.5 70	130

#### Qualifiers:

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit RL
- Reporting Detection Limit

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

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

1904474

**Client:** Harvest **Project:** Trunk L

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S
- ND Not Detected at the Reporting Limit

Reporting Detection Limit RL

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

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WO#: 1904474

Client ID: BH-8@30-32'	Batch ID:	44222	F	RunNo: 5	9043				
Prep Date: 4/9/2019	Analysis Date:	4/11/2019	5	SeqNo: 1	989010	Units: mg/K	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51 9	48.64	0	104	53.5	126			
Surr: DNOP	5.2	4.864		107	70	130			
Sample ID: 1904474-001AMS	D SampType:	MSD	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID: BH-8@30-32'	Batch ID:	44222	F	RunNo: 5	9043				
Prep Date: 4/9/2019	Analysis Date:	4/11/2019	S	SeqNo: 1	989011	Units: mg/K	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60 9	48.26	0	124	53.5	126	16.4	21.7	
Surr: DNOP	6.2	4.826		128	70	130	0	0	
Sample ID: MB-44266	SampType:	MBLK	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID:	44266	· F	RunNo: 5	9043				
Prep Date: 4/10/2019	Analysis Date:	4/11/2019	5	SeqNo: 1	989013	Units: %Rec	;		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11	10.00		106	70	130			
Sample ID: LCS-44266	SampType:	LCS	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID:	44266	F	RunNo: 5	9043				
	Analysis Date:	4/11/2019	5	SeqNo: 1	989014	Units: %Rec	;		
Prep Date: 4/10/2019	· · · · · · · · · · · · · · · · · · ·								
Prep Date: 4/10/2019 Analyte	Result PG	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

WO#: 1904474

12-Apr-19

Hall En	vironmenta	II Analy	SISL	laborate	ory, me.						12-Apr
Client: Project:	Harvest Trunk L										
Sample ID:	RB	SampT	pe: ME	3LK	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	e	
Client ID:	PBS	Batch	ID: G5	9017	F	RunNo: 5	9017				
Prep Date:		Analysis Da	ate: 4/	9/2019	S	SeqNo: 1	985583	Units: mg/Kg	3		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
asoline Range Surr: BFB	e Organics (GRO)	ND 890	5.0	1000		88.7	73.8	119			
Sample ID:	2.5UG GRO LCS	SampT	pe: LC	S	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	e	
Client ID:	LCSS	Batch	ID: G5	9017	F	RunNo: 5	9017				
Prep Date:		Analysis D	ate: 4/	9/2019	S	SeqNo: 1	985584	Units: mg/Kg	3		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	25	5.0	25.00	0	102	80.1	123			
Surr: BFB		990		1000		99.3	73.8	119			
Sample ID:	1904474-001AMS	SampT	pe: MS	6	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	e	
	BH-8@30-32'		ID: G5		F	RunNo: 5	9017				
Prep Date:	C	Analysis D	ate: 4/	9/2019	S	SeqNo: 1	985586	Units: mg/Kg	3		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	21	4.0	19.90	0	103	69.1	142		_	
Surr: BFB		820		796.2		103	73.8	119			
Sample ID:	1904474-001AMSI	D SampT	pe: MS	3D	Tes	tCode: El	PA Method	8015D: Gasol	ine Rang	e	
	BH-8@30-32'		ID: G5	9017	F	RunNo: 5	9017				
Prep Date:	-	Analysis D	ate: 4/	9/2019	S	SeqNo: 1	985587	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
,	e Organics (GRO)	20	4.0	19.90	0	100	69.1	142	2.79	20	
Surr: BFB		800		796.2		101	70.0	440	0	0	
		800				101	73.8	119	0		
	MB-44121	SampT	ype: ME		Tes			8015D: Gasol		e	
Sample ID:		SampT	ype: ME	BLK			PA Method			e	
Sample ID: Client ID:	PBS	SampT	ID: 44	3LK 121	F	tCode: El	PA Method 9017			e	
Sample ID: Client ID: Prep Date:	PBS	SampT Batch Analysis D	ID: 44 ate: 4/	3LK 121 9/2019	F	tCode: El RunNo: 5 SeqNo: 1	PA Method 9017 985591	8015D: Gasol Units: %Rec		e RPDLimit	Qual
Sample ID: Client ID: Prep Date:	PBS	SampT Batch	ID: 44	3LK 121 9/2019	F	tCode: El RunNo: 5 SeqNo: 1	PA Method 9017	8015D: Gasol	ine Rang		Qual
Sample ID: Client ID: Prep Date: Analyte Surr: BFB	PBS 4/4/2019	SampT Batch Analysis D Result 900	ID: 44 ate: 4/ PQL	3LK 121 9/2019 SPK value 1000	F SPK Ref Val	tCode: El RunNo: 5 SeqNo: 1 %REC 89.6	PA Method 9017 985591 LowLimit 73.8	8015D: Gasol Units: %Rec HighLimit 119	ine Rang %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Surr: BFB Sample ID:	PBS 4/4/2019 LCS-44121	SampT Batch Analysis D Result 900 SampT	ID: 44 ate: 4/ PQL ype: LC	BLK 121 9/2019 SPK value 1000	F SPK Ref Val Tes	tCode: El RunNo: 5 SeqNo: 1 %REC 89.6 tCode: El	PA Method 9017 985591 LowLimit 73.8 PA Method	8015D: Gasol Units: %Rec HighLimit	ine Rang %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Surr: BFB Sample ID: Client ID:	PBS 4/4/2019 LCS-44121 LCSS	SampT Batch Analysis D Result 900 SampT Batch	ID: 44 ate: 4/ PQL ype: LC	3LK 121 9/2019 SPK value 1000 SS 121	F SPK Ref Val Tes F	tCode: El RunNo: 5 SeqNo: 1 %REC 89.6 tCode: El RunNo: 5	PA Method 9017 985591 LowLimit 73.8 PA Method 9017	8015D: Gasol Units: %Rec HighLimit 119 8015D: Gasol	ine Rang %RPD ine Rang	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Surr: BFB	PBS 4/4/2019 LCS-44121 LCSS	SampT Batch Analysis D Result 900 SampT	ID: 44 ate: 4/ PQL ype: LC	3LK 121 9/2019 SPK value 1000 CS 121 9/2019	F SPK Ref Val Tes F	tCode: El RunNo: 5 SeqNo: 1 %REC 89.6 tCode: El RunNo: 5 SeqNo: 1	PA Method 9017 985591 LowLimit 73.8 PA Method 9017	8015D: Gasol Units: %Rec HighLimit 119	ine Rang %RPD ine Rang	RPDLimit	Qual

Qualifiers:

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit RL Reporting Detection Limit

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

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% Recovery outside of range due to dilution or matrix S

PQL Practical Quanitative Limit

**Client:** Harvest

**Project:** Trunk L

									1	
Sample ID: RB	SampT	ype: MB	LK				8021B: Volat	iles		
Client ID: PBS	Batch	n ID: <b>B5</b>	9017	F	RunNo: 59	017				
Prep Date:	Analysis D	ate: 4/9	9/2019	S	SeqNo: 19	85631	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.6	80	120			
Sample ID: 100NG BTEX LC	SampT	ype: LC	s	Tes	tCode: EP	A Method	8021B: Volat	iles	21 21	
Client ID: LCSS	Batch	n ID: <b>B5</b>	9017	F	RunNo: 59	017				
Prep Date:	Analysis D	ate: 4/9	9/2019	S	SeqNo: 19	85632	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.4	80	120			
Toluene	0.95	0.050	1.000	0	94.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.5	80	120			
gioriooj rotur										
Surr: 4-Bromofluorobenzene	0.92		1.000		91.5	80	120			а - ю
	0.92	ype: MS		Tes			120 8021B: Volat	iles		÷ .
Surr: 4-Bromofluorobenzene	0.92 S SampT	ype: <b>MS</b>				A Method		iles		1
Surr: 4-Bromofluorobenzene Sample ID: 1904474-002AM	0.92 S SampT	n ID: <b>B5</b>	9017	F	tCode: EP	PA Method				
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b>	0.92 S SampT Batcl	n ID: <b>B5</b>	9017 9/2019	F	tCode: EP RunNo: 59	PA Method	8021B: Volat		RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte	0.92 S SampT Batcl Analysis D	n ID: <b>B5</b> Date: <b>4</b> /	9017 9/2019	F . \$	tCode: EP RunNo: 59 SeqNo: 19	PA Method 0017 085636	8021B: Volat	g	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene	0.92 S SampT Batcl Analysis D Result	n ID: B5 Date: 4/9 PQL	9017 9/2019 SPK value	F SPK Ref Val	tCode: EF RunNo: 59 SeqNo: 19 %REC	PA Method 0017 085636 LowLimit	8021B: Volat Units: mg/K HighLimit	g	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene	0.92 S SampT Batcl Analysis D Result 0.68	n ID: <b>B5</b> Date: <b>4</b> /9 PQL 0.019	9017 9/2019 SPK value 0.7513	F SPK Ref Val 0.008039	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8	PA Method 0017 085636 LowLimit 63.9	8021B: Volat Units: mg/K HighLimit 127	g	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene	0.92 IS SampT Batcl Analysis D Result 0.68 0.72	Date: 4/9 PQL 0.019 0.038	9017 9/2019 SPK value 0.7513 0.7513	F SPK Ref Val 0.008039 0.01976	tCode: EF RunNo: 59 SeqNo: 19 %REC 88.8 92.8	A Method 0017 085636 LowLimit 63.9 69.9	8021B: Volat Units: mg/K HighLimit 127 131	g	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69	Date: 4/9 PQL 0.019 0.038 0.038	9017 9/2019 SPK value 0.7513 0.7513 0.7513	F SPK Ref Val 0.008039 0.01976 0	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4	<b>PA Method</b> 0017 085636 LowLimit 63.9 69.9 71	8021B: Volat Units: mg/K HighLimit 127 131 132	g	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71	Date: 4/9 PQL 0.019 0.038 0.038	9017 9/2019 9/2019 0.7513 0.7513 0.7513 2.254 0.7513	F SPK Ref Val 0.008039 0.01976 0 0.02825	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0	<b>PA Method</b> <b>0017</b> <b>085636</b> LowLimit 63.9 69.9 71 71.8 80	8021B: Volat Units: mg/K HighLimit 127 131 132 131	g %RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 ISD SampT	Date: 4/9 PQL 0.019 0.038 0.038 0.075	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0	24 Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 24 Method	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120	g %RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b>	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 ISD SampT	PQL 0.019 0.038 0.038 0.038 0.075	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 5D 9017	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 tCode: EP	2A Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 2A Method 0017	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120	g %RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b>	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 NSD SampT Batcl	PQL 0.019 0.038 0.038 0.038 0.075	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 5D 9017 9/2019	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 tCode: EF RunNo: 59	PA Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 PA Method 0017 085637 LowLimit	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120 8021B: Volat Units: mg/K HighLimit	g %RPD illes	RPDLimit	Qual
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date:	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 USD SampT Batcl Analysis D	PQL 0.019 0.038 0.038 0.075 Type: MS h ID: B5 Date: 4/	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 5D 9017 9/2019 SPK value 0.7513	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes F	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 ttCode: EP RunNo: 59 SeqNo: 19	PA Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 PA Method 0017 085637 LowLimit 63.9	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120 8021B: Volat Units: mg/K HighLimit 127	g %RPD illes g %RPD 0.0105	RPDLimit 20	
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 SD SampT Batcl Analysis D Result	PQL 0.019 0.038 0.038 0.075 Vype: MS h ID: B5 Date: 4/2 PQL	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 5D 9017 9/2019 SPK value	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes F SPK Ref Val	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 tCode: EP RunNo: 59 SeqNo: 19 %REC	PA Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 PA Method 0017 085637 LowLimit 63.9 69.9	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120 8021B: Volat Units: mg/K HighLimit 127 131	g %RPD illes g %RPD 0.0105 0.990	RPDLimit 20 20	
Surr: 4-Bromofluorobenzene Sample ID: 1904474-002AM Client ID: BH-8@40-42' Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 1904474-002AM Client ID: BH-8@40-42' Prep Date: Analyte Benzene Toluene	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 SD SampT Batcl Analysis D Result 0.68	PQL 0.019 0.038 0.038 0.038 0.075 Type: MS h ID: B5 Date: 4/5 PQL 0.019	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 5D 9017 9/2019 SPK value 0.7513	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes F SPK Ref Val 0.008039	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 ttCode: EP RunNo: 59 SeqNo: 19 %REC 88.8	PA Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 PA Method 0017 085637 LowLimit 63.9	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120 8021B: Volat Units: mg/K HighLimit 127	g %RPD illes g %RPD 0.0105	RPDLimit 20 20 20	
Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>1904474-002AM</b> Client ID: <b>BH-8@40-42'</b> Prep Date: Analyte	0.92 S SampT Batcl Analysis D Result 0.68 0.72 0.69 2.1 0.71 SD SampT Batcl Analysis D Result 0.68 0.71	PQL 0.019 0.038 0.038 0.038 0.075 Type: <b>MS</b> h ID: <b>B5</b> Date: 4/1 PQL 0.019 0.038	9017 9/2019 SPK value 0.7513 0.7513 0.7513 2.254 0.7513 9017 9/2019 SPK value 0.7513 0.7513 0.7513	F SPK Ref Val 0.008039 0.01976 0 0.02825 Tes F SPK Ref Val 0.008039 0.01976	tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 92.8 92.4 93.7 94.0 tCode: EP RunNo: 59 SeqNo: 19 %REC 88.8 91.8	PA Method 0017 085636 LowLimit 63.9 69.9 71 71.8 80 PA Method 0017 085637 LowLimit 63.9 69.9	8021B: Volat Units: mg/K HighLimit 127 131 132 131 120 8021B: Volat Units: mg/K HighLimit 127 131	g %RPD illes g %RPD 0.0105 0.990	RPDLimit 20 20	

#### Qualifiers:

S

H Holding times for preparation or analysis exceeded PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Not Detected at the Reporting Limit ND RL Reporting Detection Limit

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

Page 9 of 10

# QC SUMMARY REPORT

WO#: 1904474

12-Apr-19

Hall Environmental Analysis Laboratory, Inc.

**Client:** Harvest **Project:** 

Trunk L

		TestCode: EPA Method 8021B: Volatiles	
Sample ID: MB-44121	SampType: MBLK	Testcode. EPA Method 8021B. Volatiles	
Client ID: PBS	Batch ID: 44121	RunNo: 59017	×
Prep Date: 4/4/2019	Analysis Date: 4/9/2019	SeqNo: 1985640 Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD	RPDLimit Qual
Surr: 4-Bromofluorobenzene	0.90 1.000	90.1 80 120	
Sample ID: LCS-44121	SampType: LCS	TestCode: EPA Method 8021B: Volatiles	
Sample ID: LCS-44121 Client ID: LCSS	SampType: LCS Batch ID: 44121	TestCode: EPA Method 8021B: Volatiles RunNo: 59017	
Client ID: LCSS	Batch ID: <b>44121</b> Analysis Date: <b>4/9/2019</b>	RunNo: <b>59017</b>	) RPDLimit Qual

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

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

Page 10 of 10

HALL ENVIRO ANALYS LABORA		L	TEL	Environmen A : 505-345-39 'ebsite: www.	490 Albuquerq 075 FAX:	l Hawki ue, NM 6 505-345	ins NE 87109 5-4107	Sam	nple Log-In C	Check List
Client Name:	larvest		Work	Order Numb	oer: 1904	474			RcptNo	: 1
Received By:	Yazmine G	arduno	4/9/2019	8:10:00 AM	M		nja	ymin lefindarti		
Completed By:	Yazmine G	arduno	4/9/2019	8:22:39 AM	M		sp	ymine leffordants		
Reviewed By: 1	DAD	1/9/19								
IB: Y	6419	119								
Chain of Custo	ody							_	_	
1. Is Chain of Cus	tody comple	te?			Yes	$\checkmark$	N	No 🗌	Not Present	
2. How was the sa	ample delive	red?			Cou	ier				
Log In 3. Was an attempt	t made to co	ol the samples	?		Yes		N	lo 🗌		
4. Were all sample	es received a	at a temperature	e of >0°C to	o 6.0°C	Yes		N	1o 🗌	NA 🗆	
5. Sample(s) in pr	oper contain	er(s)?			Yes		N	10 🗆		ž
6. Sufficient sampl	e volume fo	r indicated test(	s)?		Yes		N			
7. Are samples (ex	cept VOA a	nd ONG) prope	rly preserve	d?	Yes	$\checkmark$	N	lo 🗌 .		
8. Was preservativ	ve added to I	bottles?			Yes		N	lo 🗹	NA 🗌	1
9. VOA vials have	zero headsr	ace?			Yes		N		No VOA Vials 🗹	
10. Were any samp			en?		Yes		M	No 🔽		
11. Does paperwork					Yes		N	lo 🗆	# of preserved bottles checked for pH:	or \$12 unless noted)
(Note discrepan 12. Are matrices co			f Custody?		Yes		N	lo 🗆	Adjusted?	
13. Is it clear what a					Yes			lo 🗌	/	
14. Were all holding	times able	to be met?			Yes	$\checkmark$	N	lo 🗌	Checked by:	YG 4/9/19
(If no, notify cus	tomer for au	thorization.)						L		
Special Handlin	ng (if app	licable)				_		_	/	
15. Was client noti	fied of all dis	crepancies with	h this order?		Yes		1	No 🗌	NA 🗹	
Person N By Whon Regardin Client Ins	n:			Date Via:	eM	ail 🗌	Phone	🗌 Fax	In Person	
16. Additional rem	,									
17. <u>Cooler Inform</u>	nation			1/20-Tip-1			4.1 <u>2</u> 1 1 2 1 2			
Cooler No	Temp °C 4.4	A THE PROPERTY OF	Seal Intact	Seal No	Seal D	ate	Signe	ed By		
L'	1	1						ę.	1	

			aur Corners	Turn-Around		Next Day										-					,
		Kijun		Project Name	2:								enviro								
Mailing	Address	1700	Arraya Dr	Trunk	L			100	)1 Ц	awkin								100			
		Bloo	nfield, NM 87413	Project #:			1			5-345							4107				
Phone #	#: 505	the second s	- 44.75										alys		1 Constant	-	-				
email or	Fax#:	Chonge	> harvest midstraum. com	Project Mana	ger:			(ylu	Ô				i	24)							
	Package:	)-		Brooke	Herb		<del>4B's</del> (8021)	IO SE	/ MF			S)	1		CB's						
Stan	dard		□ Level 4 (Full Validation)				91 91	Ő	RO			SIMS)			2 P(						
Accredi					sh Aday			+ TPH (Gas only)	2	.1)	504.1)	270			808						Î
		PDF	r	On Ice:	preventure: 4.	□ No		+ ш	GRO	418	207	or 8	sla	ED2	les /		VOA				Yor
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type		BTEX + Wate	BTEX + MTBE	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method	PAH's (8310 or 8270	RCRA 8 Metals	Anions (+-Ujivo3, Noza	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
1-8-14	1100	Spil	BH-8 @30-32'	1)40Z	(001	-001	X	_	X		-	_		Ŕ	-						
1	1130		BH-8C 40-42'	]		-007	X		X					Ż							
	1430	1	BH-9 @ 27-30'			-003	X		X				Š	<u>ک</u> ا	$\uparrow$						$\neg$
	1435		BH-9@ 40-42'	V	6	-004		ľ	V		+		1	$\mathbf{T}$	+		-	-	-		$\neg$
	1133	<u> </u>	Der le lo un	· · · ·			n		7		+				+				+		$\square$
											+		-	+				+	+		$\left  - \right $
											+	-	+	+	+			+	+		$\square$
										+	-		+		-			+		$\square$	$\left  - \right $
<u>.</u>					•						+		+				-+	+	+-	-	$\vdash$
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											-		+	-				+			$\square$
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Date: 4-8-19	1763	Relinquish	1 alung	Received by:	Last	Date Time 4/8/19 /707 Date Time	Ren	narks	с: с:	Ы	her	be	21	ten	10	. 0	01	) ЭМ СОИ			
Date: 4/8/19	Time:	Tim	ed by: <u>Wat Walls</u> milted to Hall Environmental may be subc	quie	Conner	4/9/19 8:10			STREET, STREET	and the second se	The second s	and the second se	Contract of the local division of the local				Charles in the lot of	and the second se	and the second se		

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#### HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 11, 2019

Brooke Herb Harvest 1755 Arroyo Dr. Bloomfield, NM 87413 TEL: (505) 632-4475 FAX

OrderNo.: 1904537

Dear Brooke Herb:

RE: Trunk L

Hall Environmental Analysis Laboratory received 4 sample(s) on 4/10/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis	Laboratory, l	nc.	×		Date Reported: 4/11/201	.9		
CLIENT: Harvest Project: Trunk L			ient Sample I Collection Dat		H-10 @ 35-37' 9/2019 10:30:00 AM			
Lab ID: 1904537-001	Matrix: SOIL Received Date: 4/10/2019 8:10:00 AM							
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch		
EPA METHOD 300.0: ANIONS					Analyst:	smb		
Chloride	ND	60	mg/Kg	20	4/10/2019 10:54:55 AM	44254		
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst:	RAA		
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	4/10/2019 11:46:14 AM	GS5903(		
Surr: BFB	99.9	70-130	%Rec	1	4/10/2019 11:46:14 AM	GS59036		
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	Irm		
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/10/2019 3:49:09 PM	44249		
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/10/2019 3:49:09 PM	44249		
Surr: DNOP	95.1	70-130	%Rec	1	4/10/2019 3:49:09 PM	44249		
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst:	RAA		
Benzene	ND	0.022	mg/Kg	1	4/10/2019 11:46:14 AM	R59036		
Toluene	0.13	0.044	mg/Kg	1	4/10/2019 11:46:14 AM	R59036		
Ethylbenzene	ND	0.044	mg/Kg	1	4/10/2019 11:46:14 AM	R59036		
Xylenes, Total	0.13	0.088	mg/Kg	1	4/10/2019 11:46:14 AM	R59036		
Surr: 1,2-Dichloroethane-d4	86.2	70-130	%Rec	1	4/10/2019 11:46:14 AM	R59036		
Surr: 4-Bromofluorobenzene	98.1	70-130	%Rec	1	4/10/2019 11:46:14 AM	R59036		
Surr: Dibromofluoromethane	89.2	70-130	%Rec	1	4/10/2019 11:46:14 AM	R59036		
Surr: Toluene-d8	95.0	70-130	%Rec	1	4/10/2019 11:46:14 AM	R59036		

Qualifiers:

H Holding times for preparation or analysis exceeded

PQL Practical Quanitative Limit . S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

**Analytical Report** Lab Order 1904537

Page 1 of 9

Hall Er	nvironmental Analy	ysis Laboratory, I	nc.				Lab Order <b>1904537</b> Date Reported: <b>4/11/20</b>	19	
CLIENT:	Harvest		CI	lient Sa	ample II	D: BI	H-10 @ 40-42'		
<b>Project:</b>	Trunk L		(	Collect	ion Dat	e: 4/9	0/2019 10:35:00 AM	3.	
Lab ID:	1904537-002	Matrix: SOIL Received Date: 4/10/2019 8:10:00 AM							
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	Batch	
EPA MET	HOD 300.0: ANIONS						Analyst	smb	
Chloride		ND	60		mg/Kg	20	4/10/2019 11:07:19 AM	44254	
EPA MET	HOD 8015D MOD: GASOLI	NE RANGE					Analyst	RAA	
Gasoline	Range Organics (GRO)	210	38		mg/Kg	10	4/10/2019 2:37:55 PM	GS5903(	
Surr: E		102	70-130		%Rec	10	4/10/2019 2:37:55 PM	GS5903(	
EPA MET	HOD 8015M/D: DIESEL RA	NGE ORGANICS					Analyst	Irm	
Diesel Ra	ange Organics (DRO)	32	9.7		mg/Kg	1	4/10/2019 4:11:20 PM	44249	
Motor Oi	Range Organics (MRO)	ND	49		mg/Kg	1	4/10/2019 4:11:20 PM	44249	
Surr: [	DNOP	103	70-130		%Rec	1	4/10/2019 4:11:20 PM	44249	
EPA MET	HOD 8260B: VOLATILES S	HORT LIST					Analyst	RAA	
Benzene		0.26	0.19		mg/Kg	10	4/10/2019 2:37:55 PM	R59036	
Toluene		2.9	0.38		mg/Kg	10	4/10/2019 2:37:55 PM	R59036	
Ethylben	zene	ND	0.38		mg/Kg	10	4/10/2019 2:37:55 PM	R59036	
Xylenes,	Total	4.8	0.77		mg/Kg	10	4/10/2019 2:37:55 PM	R59036	
Surr: 1	1,2-Dichloroethane-d4	87.7	70-130		%Rec	10	4/10/2019 2:37:55 PM	R59036	
Surr: 4	4-Bromofluorobenzene	. 99.2	70-130	2	%Rec	10	4/10/2019 2:37:55 PM	R59036	
Surr: [	Dibromofluoromethane	90.9	70-130		%Rec	10	4/10/2019 2:37:55 PM	R59036	
Surr: 7	Foluene-d8	96.6	70-130		%Rec	10	4/10/2019 2:37:55 PM	R59036	

Qualifiers:

Holding times for preparation or analysis exceeded Practical Quanitative Limit н

PQL S % Recovery outside of range due to dilution or matrix ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

**Analytical Report** 

Page 2 of 9

Hall Environmental Analysis Laboratory, Inc.       Lab Order 1904537         Date Reported: 4/11/2019											
CLIENT: Harvest		CI	lient Sa	ample II	D:BI	H-11 @ 30-32'					
Project: Trunk L			Collect	ion Dat	e: 4/9	0/2019 1:40:00 PM					
Lab ID: 1904537-003	Matrix: SOIL		Recei	ved Dat	e: 4/1	0/2019 8:10:00 AM					
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS						Analyst	smb				
Chloride	ND	60		mg/Kg	20	4/10/2019 11:19:44 AM	44254				
EPA METHOD 8015D MOD: GASOL	INE RANGE					Analyst	RAA				
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/10/2019 3:06:24 PM	GS5903(				
Surr: BFB	104	70-130		%Rec	1	4/10/2019 3:06:24 PM	GS5903(				
EPA METHOD 8015M/D: DIESEL RA	ANGE ORGANICS					Analyst	Irm				
Diesel Range Organics (DRO)	13	9.6		mg/Kg	1	4/10/2019 3:25:44 PM	44249				
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/10/2019 3:25:44 PM	44249				
Surr: DNOP	112	70-130		%Rec	1	4/10/2019 3:25:44 PM	44249				
EPA METHOD 8260B: VOLATILES	SHORT LIST					Analyst	RAA				
Benzene	ND	0.020		mg/Kg	1	4/10/2019 3:06:24 PM	R59036				
Toluene	ND	0.040		mg/Kg	1	4/10/2019 3:06:24 PM	R59036				
Ethylbenzene	ND	0.040		mg/Kg	1	4/10/2019 3:06:24 PM	R59036				
Xylenes, Total	ND	0.081		mg/Kg	1	4/10/2019 3:06:24 PM	R59036				
Surr: 1,2-Dichloroethane-d4	87.5	70-130		%Rec	1	4/10/2019 3:06:24 PM	R59036				
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/10/2019 3:06:24 PM	R59036				
Surr: Dibromofluoromethane	87.9	70-130		%Rec	1	4/10/2019 3:06:24 PM	R59036				
Surr: Toluene-d8	93.8	70-130		%Rec	1	4/10/2019 3:06:24 PM	R59036				

Qualifiers:

H Holding times for preparation or analysis exceeded PQL Practical Quanitative Limit S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

Reporting Detection Limit RL W

Sample container temperature is out of limit as specified at testcode

**Analytical Report** 

Page 3 of 9

Hall Environmental An	alysis Laboratory, Iı	nc.				Lab Order 1904537 Date Reported: 4/11/201	.9				
CLIENT: Harvest				-		H-11 @ 40-42'					
Project:         Trunk L           Lab ID:         1904537-004	Matrix: SOIL			te: 4/9/2019 1:45:00 PM te: 4/10/2019 8:10:00 AM							
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS						Analyst	smb				
Chloride	ND	60		mg/Kg	20	4/10/2019 11:32:08 AM	44254				
EPA METHOD 8015D MOD: GAS	OLINE RANGE					Analyst	RAA				
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/10/2019 3:34:53 PM	GS59036				
Surr: BFB	106	70-130		%Rec	1	4/10/2019 3:34:53 PM	GS59036				
EPA METHOD 8015M/D: DIESEL	RANGE ORGANICS					Analyst	Irm				
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/10/2019 3:50:03 PM	44249				
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/10/2019 3:50:03 PM	44249				
Surr: DNOP	114	70-130		%Rec	1	4/10/2019 3:50:03 PM	44249				
EPA METHOD 8260B: VOLATILE	S SHORT LIST					Analyst	RAA				
Benzene	ND	0.020		mg/Kg	1	4/10/2019 3:34:53 PM	R59036				
Toluene	ND	0.040		mg/Kg	1	4/10/2019 3:34:53 PM	R59036				
Ethylbenzene	ND	0.040		mg/Kg	1	4/10/2019 3:34:53 PM	R59036				
Xylenes, Total	ND	0.079		mg/Kg	1	4/10/2019 3:34:53 PM	R59036				
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%Rec	1	4/10/2019 3:34:53 PM	R59036				
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/10/2019 3:34:53 PM	R59036				
Surr: Dibromofluoromethane	92.1	70-130		%Rec	1	4/10/2019 3:34:53 PM	R59036				
Surr: Toluene-d8	94.5	70-130		%Rec	1	4/10/2019 3:34:53 PM	R59036				

Qualifiers:

Holding times for preparation or analysis exceeded н Practical Quanitative Limit

PQL S % Recovery outside of range due to dilution or matrix ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

**Analytical Report** 

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# QC SUMMARY REPORT

#### Hall Environmental Analysis Laboratory, Inc.

**Client:** Harvest **Project:** 

Trunk L

Sample ID: MB-44254	SampType:	MBLK	Tes	tCode: EPA Method	6	9		
Client ID: PBS	Batch ID:	44254	F	RunNo: <b>59038</b>				
Prep Date: 4/10/2019	Analysis Date:	4/10/2019	5	SeqNo: 1988133	Units: mg/K	g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND 1	.5						e ::
Sample ID: LCS-44254	SampType:	LCS	Tes	tCode: EPA Method	300.0: Anions	6		
Sample ID: LCS-44254 Client ID: LCSS	SampType: Batch ID:			tCode: EPA Method RunNo: 59038	300.0: Anion	3		
	1 31	44254	F		300.0: Anions Units: mg/K			
Client ID: LCSS	Batch ID:	44254 4/10/2019	F	RunNo: <b>59038</b>			RPDLimit	Qual

#### Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix S

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

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Client: Harvest Project: Trunk L

Sample ID: 1 CS 44240	SampType: LCS TestCode: EPA Met						904 EM/D: Di	Deal Dana	Organico	
Sample ID: LCS-44249	Sampi	ype. LC	3	165		PAIwethou	0015WI/D. DI	ser Range	organics	
Client ID: LCSS	Batch	ID: 442	249	F	RunNo: 5	9045				
Prep Date: 4/10/2019	Analysis D	Analysis Date: 4/10/2019			SeqNo: 1	987412	412 Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	63.9	124			
Surr: DNOP	4.6		5.000		92.2	70	130			
Sample ID: MB-44249	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	ID: 442	249	F	RunNo: 5	9045				
Prep Date: 4/10/2019	Analysis D	ate: 4/	10/2019	S	SeqNo: 1	987413	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	70	130			

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

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WO#: 1904537

**Client:** Harvest **Project:** 

Trunk L

Sample ID: 100ng Ics	SampT	ype: LC	s	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: LCSS	Batch	1D: R5	9036	F	RunNo: 5	9036				
Prep Date:	Analysis D	ate: 4/	10/2019	5	SeqNo: 1	987135	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.025	1.000	0	79.3	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Ethylbenzene	0.99	0.050	1.000	0	98.9	70	130			
Xylenes, Total	3.0	0.10	3.000	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.9	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.0	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.5	70	130			
Surr: Toluene-d8	0.49		0.5000		97.6	70	130			
Sample ID: rb	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS		1D: R5		F	RunNo: 5	9036				
Prep Date:	Analysis D	ate: 4/	10/2019	5	SeqNo: 1	987137	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.43		0.5000		85.3	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		105	70	130			
Surr: Dibromofluoromethane	0.44		0.5000		87.7	70	130			
Surr: Toluene-d8	0.49		0.5000		97.8	70	130			
Sample ID: 1904537-001ams	SampT	ype: MS	3	Tes	tCode: E	PA Method	8260B: Volat	iles Short	List	
Client ID: BH-10 @ 35-37'	Batch	ID: R5	9036	F	RunNo: 5	9036				
Prep Date:	Analysis D	ate: 4/	10/2019	S	SeqNo: 1	988420	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.022	0.8787	0.01556	83.4	68.9	131			
Toluene	0.99	0.044	0.8787	0.1281	98.1	64.3	137			
Toldene	0.00				00 5	70	130			
	0.87	0.044	0.8787	0	99.5	70	100			
Ethylbenzene			0.8787 2.636	0 0.1253	99.5 99.6	70	130			
Ethylbenzene	0.87	0.044								
Ethylbenzene Xylenes, Total	0.87 2.8	0.044	2.636		99.6	70	130			
Ethylbenzene Xylenes, Total Surr: 1,2-Dichloroethane-d4	0.87 2.8 0.38	0.044	2.636 0.4394		99.6 86.9	70 70	130 130			

#### Qualifiers:

S

H Holding times for preparation or analysis exceeded PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit RL Reporting Detection Limit

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

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WO#: 1904537

Client: Project:

Harvest Trunk L

Sample ID: 1904537-001ams	d Samp1	SampType: MSD TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: BH-10 @ 35-37'	Batc	h ID: R5	9036	F	RunNo: 5	9036					
Prep Date:	Analysis E	alysis Date: 4/10/2019 SeqNo: 1988421 Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.70	0.022	0.8787	0.01556	77.8	68.9	131	6.88	20		
Toluene	0.95	0.044	0.8787	0.1281	93.7	64.3	137	3.92	20		
Ethylbenzene	0.84	0.044	0.8787	0	95.8	70	130	3.76	0		
Xylenes, Total	2.7	0.088	2.636	0.1253	95.8	70	130	3.66	0		
Surr: 1,2-Dichloroethane-d4	0.38		0.4394		86.4	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.44		0.4394		99.8	70	130	0	0		
Surr: Dibromofluoromethane	0.39		0.4394		89.4	70	130	0	0		
Surr: Toluene-d8	0.42		0.4394		94.8	70	130	0	0		

#### Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit

RL Reporting Detection Limit

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

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WO#: **190453**7

Client: Harvest Project: Trunk L

Sample ID: 2.5ug gro Ics	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: GS59036			RunNo: 59036						
Prep Date:	Analysis Date: 4/10/2019			SeqNo: 1987141			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.4	70	130			
Surr: BFB	500		500.0		101	70	130			
Sample ID: rb	SampType: MBLK			TestCode: EPA Method 8015D Mod: Gasoline R					Range	
	Batch ID: GS59036			RunNo: <b>59036</b>						
Client ID: PBS	Batch	ID: GS	59036	F	RunNo: 59	9036				
Client ID: PBS Prep Date:	Batch Analysis D		59036 10/2019		RunNo: <b>5</b> 9 SeqNo: <b>1</b> 9		Units: mg/K	g		
			10/2019				Units: <b>mg/K</b> HighLimit	g %RPD	RPDLimit	Qual
Prep Date:	Analysis D	ate: 4/	10/2019	S	SeqNo: 19	987143	0	0	RPDLimit	Qual

Qualifiers:

- H Holding times for preparation or analysis exceeded
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- ND Not Detected at the Reporting Limit
- RL Reporting Detection Limit

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

Page 9 of 9

Clent Name:       Harvest       Work Order Number: 1904537       RpDNo: 1         Received By:       Ame Thome       4/10/2019 8:16:10 AM       Ime. ILL         Reviewed By:       M.G. U.L.       M.G. U.L.       Ime. ILL         Chain of Custody       M.G. U.L.       M.G. U.L.       Ime. ILL         Labulation of Custody complete?       Yes       No       Not Present         1. Is Chain of Custody complete?       Yes       No       NA         2. How was the sample delivered?       Courier       Ime. ILL         Goaln       Samplete is exceived at a temperature of >0° C to 6.0°C       Yes       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA       Ime.         5. Samplet(s) in proper container(s)?       Yes       No       NA       Ime.       Ime.         6. Sufficient sample value for indicated test(s)?       Yes       No       NA       Ime.       Ime.         9. VOA valis have zero hesdapace?       Yes       No       No       MA       Ime.       Ime.         10. Were any sample containers received broken?       Yes       No       Ime.       Ime.       Ime.       Ime.       Ime.         10. Were any sample containers received broken? <th>HALL ENVIRONMENTAL ANALYSIS LABORATORY</th> <th>TE</th> <th>ll Environmental Albu Albu L: 505-345-3975 Website: www.hal</th> <th>4901 Hawk querque, NM FAX: 505-34</th> <th>ins NE 87109 Sai 5-4107</th> <th>mple Log-In (</th> <th>Check List</th>	HALL ENVIRONMENTAL ANALYSIS LABORATORY	TE	ll Environmental Albu Albu L: 505-345-3975 Website: www.hal	4901 Hawk querque, NM FAX: 505-34	ins NE 87109 Sai 5-4107	mple Log-In (	Check List
Completed By:       And Thome       410/2019 8:16:10 AM       One       AL         Reviewed By:       Y       G       U/U/U/U       AL       Output       AL         Chain of Custody       AL       Mo       No       Not Present          1.       Is Chain of Custody complete?       Yes       No       No       Not Present         2.       How was the sample delivered?       Courier        No       NA         3.       Was an attempt made to cool the samples?       Yes       No       NA          4.       Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA          5.       Sample(s) in proper container(s)?       Yes       No       NA           6.       Sufficient sample solume for indicated test(s)?       Yes       No       NA           9.       VOA vials have zero headspace?       Yes       No       No             10.       Were authous correctly identified on Chain of Custody?       Yes       No               Adjustod? </td <td>Client Name: Harvest</td> <td>Work</td> <td>Order Number:</td> <td>1904537</td> <td></td> <td>RcptNo</td> <td>: 1</td>	Client Name: Harvest	Work	Order Number:	1904537		RcptNo	: 1
Completed By:       And Thome       410/2019 8:16:10 AM       One       AL         Reviewed By:       Y       G       U/U/U/U       AL       Output       AL         Chain of Custody       AL       Mo       No       Not Present          1.       Is Chain of Custody complete?       Yes       No       No       Not Present         2.       How was the sample delivered?       Courier        No       NA         3.       Was an attempt made to cool the samples?       Yes       No       NA          4.       Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA          5.       Sample(s) in proper container(s)?       Yes       No       NA           6.       Sufficient sample solume for indicated test(s)?       Yes       No       NA           9.       VOA vials have zero headspace?       Yes       No       No             10.       Were authous correctly identified on Chain of Custody?       Yes       No               Adjustod? </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Reviewed By:       Y G U  0  4         Labulation of Custody         1. Is Chain of Custody complete?       Yes V       No       Not Present         2. How was the sample delivered?       Couriert         Log In       3. Was an attempt made to cool the samples?       Yes V       No       NA         4. Were all samples received at a temperature of >0° C to 8.0°C       Yes V       No       NA         5. Sample(s) in proper container(s)?       Yes V       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes V       No       NA         7. Are samples (except VOA and ONG) property preserved?       Yes VoA       No       NA         8. Was preservative added to bottle?       Yes VoA       No       NA       If of preserved bottles checked         9. VOA viais have zero headspace?       Yes VoA       No       If of preserved bottles checked       If of preserved bottles checked         11. Does papervork match bottle labels?       Yes VoA       No       If of preserved bottles checked       If of preserved bottles checked         12. Are matrice correctly identified on Chain of Custody?       Yes VoA       No       If of preserved bottles noted)         12. Are matrice correctly identified on Chain of Custody?       Yes VoA       No       If of preserved bottles of ad ladicrepancies wit	Received By: Anne Thorne	4/10/20	019 8:10:00 AM		anne H.	in-	
Reviewed By:       Y G U  0  4         Labulation of Custody         1. Is Chain of Custody complete?       Yes V       No       Not Present         2. How was the sample delivered?       Couriert         Log In       3. Was an attempt made to cool the samples?       Yes V       No       NA         4. Were all samples received at a temperature of >0° C to 8.0°C       Yes V       No       NA         5. Sample(s) in proper container(s)?       Yes V       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes V       No       NA         7. Are samples (except VOA and ONG) property preserved?       Yes VoA       No       NA         8. Was preservative added to bottle?       Yes VoA       No       NA       If of preserved bottles checked         9. VOA viais have zero headspace?       Yes VoA       No       If of preserved bottles checked       If of preserved bottles checked         11. Does papervork match bottle labels?       Yes VoA       No       If of preserved bottles checked       If of preserved bottles checked         12. Are matrice correctly identified on Chain of Custody?       Yes VoA       No       If of preserved bottles noted)         12. Are matrice correctly identified on Chain of Custody?       Yes VoA       No       If of preserved bottles of ad ladicrepancies wit			019 8:16:10 AM		anne H.		
Chain of Custody         1. is Chain of Custody         1. is Chain of Custody         1. is Chain of Custody complete?         Yes Ø       No         No       Not Present         2. How was the sample delivered?       Courier         Xwas an attempt made to cool the samples?       Yes Ø       No       NA         3. Was an attempt made to cool the samples?       Yes Ø       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes Ø       No       NA         5. Sample(s) in proper container(s)?       Yes Ø       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes Ø       No       NA         7. Are samples (except VOA and ONO) properly preserved?       Yes Ø       No       NA         8. Was preservative added to botitie?       Yes Ø       No       MA         9. VOA viais have zero headspace?       Yes Ø       No       Ma       If of preserved MIIO         10. Were any sample containers received broken?       Yes Ø       No       Adjusted?       Adjusted?         12. Are matrices correctly identified on Chain of Custody?       Yes Ø       No       Adjusted?       Adjusted?         13. Is it clear what analyses were requested?       Yes Ø       No <td>Reviewed By: YG 4</td> <td>ioha</td> <td></td> <td></td> <td></td> <td></td> <td>(a) (b)</td>	Reviewed By: YG 4	ioha					(a) (b)
Chain of Custody         1. is Chain of Custody         1. is Chain of Custody         1. is Chain of Custody complete?         Yes Ø       No         No       Not Present         2. How was the sample delivered?       Courier         Xwas an attempt made to cool the samples?       Yes Ø       No       NA         3. Was an attempt made to cool the samples?       Yes Ø       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes Ø       No       NA         5. Sample(s) in proper container(s)?       Yes Ø       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes Ø       No       NA         7. Are samples (except VOA and ONO) properly preserved?       Yes Ø       No       NA         8. Was preservative added to botitie?       Yes Ø       No       MA         9. VOA viais have zero headspace?       Yes Ø       No       Ma       If of preserved MIIO         10. Were any sample containers received broken?       Yes Ø       No       Adjusted?       Adjusted?         12. Are matrices correctly identified on Chain of Custody?       Yes Ø       No       Adjusted?       Adjusted?         13. Is it clear what analyses were requested?       Yes Ø       No <td>Labeled by: A</td> <td>504110119</td> <td></td> <td></td> <td></td> <td>×.</td> <td></td>	Labeled by: A	504110119				×.	
2. How was the sample delivered?       Courier         J. Was an attempt made to cool the samples?       Yes Ø       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes Ø       No       NA         5. Sample(s) in proper container(s)?       Yes Ø       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes Ø       No       NA         7. Are samples (except VOA and ONG) properly preserved?       Yes Ø       No       NA         9. VOA viais have zero headspace?       Yes Ø       No       NA       If of preserved bottles?         10. Were any sample containers received broken?       Yes Ø       No       If of preserved bottles?       Yes Ø       No         11. Does paperwork match bottle labels?       Yes Ø       No       If of preserved bottles?       Yes Ø       No       If of preserved bottles?       If of preserved bottles?       If of preserved bottles?       If of preserved bottles?       Yes Ø       No       If of preserved bottles?       If of preserved bottles?       If of preserved?       Yes Ø       No       If of preserved bottles?       If of preserved bottles?       Yes Ø       No       If of preserved bottles?       Yes Ø       No       If of preserved bottles?       Yes Ø       No       If of preserved bottles?       Yes Ø	Chain of Custody						
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 8.0°C       Yes       No       NA         5. Sample(s) in proper container(s)?       Yes       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes       No       NA         7. Are samples (except VOA and ONG) properly preserved?       Yes       No       NA         8. Was preservative added to bottles?       Yes       No       NA         9. VOA vials have zero headspace?       Yes       No       No       No         10. Were any sample containers received broken?       Yes       No       Iff       Of preserved         11. Does paperwork match bottle labels?       Yes       No       Iff       Of preserved       Aff UCI         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Iff       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Iff       Adjusted?         14. Wore all holding times able to be met?       Yes       No       Iff       Adjusted?         15. Was client notified of all discrepancies with this order?       Yes       No       NA       Iff <td< td=""><td>1. Is Chain of Custody complete</td><td>?</td><td></td><td>Yes 🗹</td><td>No 🗌</td><td>Not Present</td><td></td></td<>	1. Is Chain of Custody complete	?		Yes 🗹	No 🗌	Not Present	
3. Was an attempt made to cool the samples?       Yes       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA         5. Sample(s) in proper container(s)?       Yes       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes       No       NA         7. Are samples (except VOA and ONG) properly preserved?       Yes       No       NA         9. VOA vials have zero headspace?       Yes       No       No       NA         10. Were any sample containers received broken?       Yes       No       Iff       Jiff         11. Does paperwork match bottle labels?       Yes       No       Iff       Jiff       Jiff         12. Are matices correctly identified on Chain of Custody?       Yes       No       Adjusted?       Jiff         13. Is it clear what analyses were requested?       Yes       No       Adjusted?       Jiff         14. Were all holding times able to be mat?       Yes       No       NA       Person Notified         15. Was client notified of all discrepancies with this order?       Yes       No       NA       Person         16. Additional remarks:       17.       Cooler Information       Seal Intact       Seal No       Signed By	2. How was the sample delivered	1?		Courier			
3. Was an attempt made to cool the samples?       Yes       No       NA         4. Were all samples received at a temperature of >0° C to 6.0°C       Yes       No       NA         5. Sample(s) in proper container(s)?       Yes       No       NA         6. Sufficient sample volume for indicated test(s)?       Yes       No       NA         7. Are samples (except VOA and ONG) properly preserved?       Yes       No       NA         9. VOA vials have zero headspace?       Yes       No       No       NA         10. Were any sample containers received broken?       Yes       No       Iff       Jiff         11. Does paperwork match bottle labels?       Yes       No       Iff       Jiff       Jiff         12. Are matices correctly identified on Chain of Custody?       Yes       No       Adjusted?       Jiff         13. Is it clear what analyses were requested?       Yes       No       Adjusted?       Jiff         14. Were all holding times able to be mat?       Yes       No       NA       Person Notified         15. Was client notified of all discrepancies with this order?       Yes       No       NA       Person         16. Additional remarks:       17.       Cooler Information       Seal Intact       Seal No       Signed By	Log In						
5. Sample(s) in proper container(s)?       Yes       No         6. Sufficient sample volume for indicated test(s)?       Yes       No         7. Are samples (except VOA and ONG) properly preserved?       Yes       No         8. Was preservative added to bottles?       Yes       No         9. VOA vials have zero headspace?       Yes       No         10. Were any sample containers received broken?       Yes       No         11. Does paperwork match bottle labels?       Yes       No         12. Are matrices correctly identified on Chain of Custody?       Yes       No         13. Is it clear what analyses were requested?       Yes       No         44. Were all holding times able to be met?       Yes       No         (if no, notify customer for authorization.)       See No       Checked by         Special Handling (if applicable)       Date       Person Notified:       Date         18. Additional remarks:       11.       Cooler Information       Seal No       Seal No         16. Additional remarks:       11.       10.       Good Yes       Yes       Signed By		the samples?		Yes 🗹	No	NA 🗌	
6. Sufficient sample volume for indicated test(s)?       Yes       No         7. Are samples (except VOA and ONG) property preserved?       Yes       No         8. Was preservative added to bottles?       Yes       No       NA         9. VOA vials have zero headspace?       Yes       No       NA         10. Were any sample containers received broken?       Yes       No       Ma         11. Does paperwork match bottle labels?       Yes       No       # of preserved broken?         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       No       Checked br         15. Was client notified of all discrepancies with this order?       Yes       No       NA       In Person         Regarding:	4. Were all samples received at a	a temperature of >0° C	to 6.0°C	Yes 🗹	No 🗌	NA 🗌	
7. Are samples (except VOA and ONG) property preserved? Yes No   8. Was preservative added to bottles? Yes No   9. VOA vials have zero headspace? Yes No   10. Were any sample containers received broken? Yes No   11. Does paperwork match bottle labels? Yes No   (Note discrepancies on chain of custody) Yes No   12. Are matrices correctly identified on Chain of Custody? Yes No   13. Is it clear what analyses were requested? Yes No   14. Were all holding times able to be met? Yes No   (if no, notify customer for authorization.) Special Handling (if applicable)   15. Was client notified: Date   By Whom: Via: eMail   Person Notified: Via:   By Whom: Via:   Client Instructions:   16. Additional remarks:   17. Cooler information   2 1.0   Goold Yes	5. Sample(s) in proper container	(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   10. Were any sample containers received broken? Yes No Was   11. Does paperwork match bottle labels? Yes No Was   12. Are matrices correctly identified on Chain of Custody? Yes No Ho   13. Is it clear what analyses were requested? Yes No Adjusted?   14. Were all holding times able to be met? Yes No Checked be   15. Was client notified of all discrepancies with this order? Yes No NA   Ferson Notified:   Date Date Endmail Phone Fax In Person   Regarding: Cilent Instructions: Yes No NA In Person   16. Additional remarks: 11. O Good Yes Seal No Seal Date Signed By	6. Sufficient sample volume for ir	idicated test(s)?		Yes 🔽	No 🗌		
9. VOA vials have zero headspace?       Yes       No       No VOA Vials       Image: second seco			ed?	Yes 🔽	No 🗌	х .	
10. Were any sample containers received broken?       Yes       No       # of preserved bottle labels?         11. Does paperwork match bottle labels?       Yes       No       # of preserved bottles checked for pH:         (Note discrepancies on chain of custody)       Yes       No       Image: Contract on the custod of the custom of the cu	8. Was preservative added to bot	tles?		Yes	No 🔽	NA 🗌	
10. Were any sample containers received broken?       Yes       No       # of preserved bottle labels?         11. Does paperwork match bottle labels?       Yes       No       # of preserved bottles checked for pH:         (Note discrepancies on chain of custody)       Yes       No       Image: Contract on the custod of the custom of the cu	9. VOA vials have zero headspace	e?		Yes	No 🗌	No VOA Vials	
11. Does paperwork match bottle labels?       Yes       No       for pH:       (<2 or > 12 unless noted)         12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Adjusted?         14. Were all holding times able to be met?       Yes       No       Checked by         15. Was client notified of all discrepancies with this order?       Yes       No       NA         15. Was client notified:       Date					No 🔽		10
12. Are matrices correctly identified on Chain of Custody?       Yes       No       Adjusted?         13. Is it clear what analyses were requested?       Yes       No       Checked by         14. Were all holding times able to be met? (If no, notify customer for authorization.)       Yes       No       Checked by         Special Handling (If applicable)       15. Was client notified of all discrepancies with this order?       Yes       No       NA         15. Was client notified:	11. Does paperwork match bottle I	abels?		Yes 🗹	No 🗌	bottles checked for pH:	· /
12. Not matched contently donated on chain of obstody?       Yes       No         13. Is it clear what analyses were requested?       Yes       No         14. Were all holding times able to be met?       Yes       No       Checked by         14. Were all holding times able to be met?       Yes       No       Checked by         Special Handling (if applicable)       15. Was client notified i all discrepancies with this order?       Yes       No       NA         9 Person Notified:					·	A	>12 inless noted)
14. Were all holding times able to be met? (If no, notify customer for authorization.)       Yes       No       Checked.by         Special Handling (If applicable)         15. Was client notified of all discrepancies with this order?       Yes       No       NA         Person Notified:						-4	Y
(If no, notify customer for authorization.)         Special Handling (If applicable)         15. Was client notified of all discrepancies with this order?       Yes       No       NA         Person Notified:       Date						Checked by	
15. Was client notified of all discrepancies with this order?       Yes       No       NA       ✓         Person Notified:       Date       ✓	•					0-	
Person Notified:       Date         By Whom:       Via:       eMail       Phone       Fax       In Person         Regarding:       Client Instructions:       Image: Client	Special Handling (if applic	able)					
By Whom:       Via:       eMail       Phone       Fax       In Person         Regarding:       Client Instructions:       In Person       In Person         16. Additional remarks:       16. Additional remarks:       Intact       Seal No       Seal Date       Signed By         1       1.0       Good       Yes       Intact       Seal No       Seal Date       Signed By         2       1.0       Good       Yes       Intact       Seal Date       Signed By	15. Was client notified of all discre	pancies with this order?	?	Yes 🗌	No 🗌	NA 🗹	
Regarding: Client Instructions:         16. Additional remarks:         17. Cooler Information         Cooler No       Temp *C         Cooler No	Person Notified:		Date				
Client Instructions:         16. Additional remarks:         17. Cooler Information         Cooler IN0       Temp *C         I       1.0         Good       Yes         2       1.0         Good       Yes	p		Via:	eMail	Phone 🗌 Fax	In Person	
16. Additional remarks: 17. <u>Cooler Information</u> <u>Cooler No</u> <u>Temp °C</u> <u>Condition</u> <u>Seal Intact</u> <u>Seal No</u> <u>Seal Date</u> <u>Signed By</u> <u>1 1.0 Good Yes</u> <u>2 1.0 Good Yes</u>	ц						9
17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1 1.0 Good Yes 2 1.0 Good Yes	ą						
Cooler No     Temp *C     Condition     Seal Intact     Seal No     Seal Date     Signed By       1     1.0     Good     Yes     Image: Cooler No     Seal No     Seal Date     Signed By       2     1.0     Good     Yes     Image: Cooler No     Seal No     Seal Date     Signed By	16. Additional remarks:						
1         1.0         Good         Yes           2         1.0         Good         Yes					-	1.0	
2 1.0 Good Yes	A want and the state of the second state of th	The property of the back limb like is an and it and and an and any any of the	Seal No Se	al Date	Signed By		
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Page 1 of 1

Turn-Around Time:
Standard Rush Same day HALL ENVIRONMENTAL
Project Name:
Trunk L         4901 Hawkins NE - Albuquerque, NM 87109           Project #:         Tol. 505 245 2075
Project #: Tel. 505-345-3975 Fax 505-345-4107
Analysis Request
Project Manager:
Brooke Herb Sampler: Josh Adgm 5 Sampler: Josh Adgm 5
Sampler:         JOSh         Adgm 5         Image: Second seco
# of Coolers:
Project Manager: Brooke Herp Sampler: Josh Addans Sampler: Josh Addans BIEX / Mather Sampler: Josh Addans BIEX / Mather Sampler: Josh Addans BIEX / Mather Sampler: Josh Addans BIEX / Mather Sampler: Josh Addans Sampler: Josh Addans BIEX / Mather Sampler: Josh Addans Sampler: Josh Addans Sam
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ZCZXX X X
703 X X X X
J E ZOUXX X
Received by: Via: Date Time Remarks: cc: bherbeltenu.com Mutur Data 1/9/19 1585 Received by: Via: Date Time 04/10/19 Carroll @ Itenu.com