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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	1014
Facility ID	
Application ID	

NMOCD
MAR 27 2019
DISTRICT III

Release Notification

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)*	NCS1907233330
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.430000 Longitude -107.476944
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral H-21	Site Type Pipeline
Date Release Discovered 3/12/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
F	4	25N	6W	Rio Arriba

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) Unknown at this time	Volume Recovered (bbls) Currently being recovered
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls) Unknown at this time	Volume Recovered (bbls) Currently being recovered
☒ Natural Gas	Volume Released (Mcf) 658	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A line leak was discovered on the Lateral H-21 pipeline.

Upon discovery, the release was immediately stopped. Historic liquids release was discovered during excavation along with ground water impacts (ground water is at 4ft). Harvest is currently digging and hauling impacted soil. Harvest is collecting impacted ground water and removing for disposal.

(2)

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? **Natural gas release over 500mcf and impacts to ground water.**

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

Immediate notification was made by Kijun Hong (Harvest) to Cory Smith, Vanessa Fields, and Jim Griswold of the OCD by email on 3/13/2019 @ 8:42am.

Initial Response

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

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

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

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

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 3/26/2019

email: khong@harvestmidstream.com Telephone: 505-436-8457

OCD Only

Received by: Date: 4/4/19

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	NVF1902432312
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	**Harvest Midstream**	OGRID	
Contact Name	**Kijun Hong**	Contact Telephone	**(505) 632-4475**
Contact email	**khong@harvestmidstream.com**	Incident # *(assigned by OCD)*	NVF1902432312
Contact mailing address	**1755 Arroyo Dr., Farmington, NM 87413**		

Location of Release Source

Latitude **36.83651** Longitude **-107.28980**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Lateral M-3 Launcher**	Site Type **Pipeline**
Date Release Discovered **1/2/2019**	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	**6**	**30N**	**4W**	**Rio Arriba**

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **8**	Volume Recovered (bbls) **8**
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Unmarked poly line damaged during excavation.

NMOCD
APR 15 2019
DISTRICT III

27

State of New Mexico
Oil Conservation Division

Incident ID	NVF1902432312
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 4/2/2019

email: khong@harvestmidstream.com Telephone: 505-632-4475

OCD Only

Received by: Date: 4/2/19

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

Closure Approved by: Date: 4/22/19

Printed Name: Cory Title: Environmental Spec.

Executive Summary

Harvest Four Corners, LLC (Harvest) presents the following report summarizing remediation and soil sampling activities at the Lateral M-3 Launcher (Site) located in Unit P, Section 6, Township 30 North, Range 4 West, in Rio Arriba County, New Mexico (Attachment 1). On January 2, 2019, Harvest damaged an unmarked polyethylene pipeline containing produced water during excavation while conducting maintenance on a pig launcher. The polyethylene pipeline is owned by Southland Royalty Company and was not marked appropriately prior to the excavation. Approximately 8 barrels (bbl) of produced water were released and all 8 bbl were recovered with a vacuum truck. Harvest submitted a Release Notification and Corrective Action Form C-141 to the New Mexico Oil Conservation Division (NMOCD) on January 17, 2019. The NMOCD assigned the release incident number NVF1902432312.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well is SJ 02384, located approximately 1.1 miles southwest of the Site and approximately 570 feel lower in elevation than the Site (Attachment 1). The water well has a depth to groundwater of 95 feet below ground surface (bgs) and a total depth of 185 feet bgs. A New Mexico State Engineers Office (NMOSE) water column is included as Attachment 2. The closest continuously flowing water or significant watercourse to the Site is an unnamed wash located approximately 485 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine or karst geology. Based on these criteria, 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 total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride.

On January 3, 2019, Harvest collected one composite soil sample from the sidewalls and one composite soil sample from the floor of the excavation (Attachment 3). The excavation was approximately 25 feet long by 6 to 10 feet wide with an average depth of 6 feet below ground surface. A map of the excavation extent is shown included as Attachment 4.

The soil samples were shipped following chain-of-custody procedures to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH- motor oil range organics (MRO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results indicated that concentrations of benzene, BTEX, TPH, and chloride were compliant with the NMOCD Table 1 closure criteria in both soil samples collected. A table with laboratory analytical data is included as Attachment 5 and copies of the laboratory analytical results are included as Attachment 6. Harvest requests no further action for incident number

NVF1902432312. An updated NMOCD Form C-141 is included as a cover to this report. A photographic log of the Site is included as Attachment 7.

Attachments:

Attachment 1	Site Location Map
Attachment 2	NMOSE water Column Report
Attachment 3	Field Map
Attachment 4	Site Map
Attachment 5	Soil Analytical Results
Attachment 6	Laboratory Analytical Reports
Attachment 7	Photographic Log

ATTACHMENT 1

Site Location Map

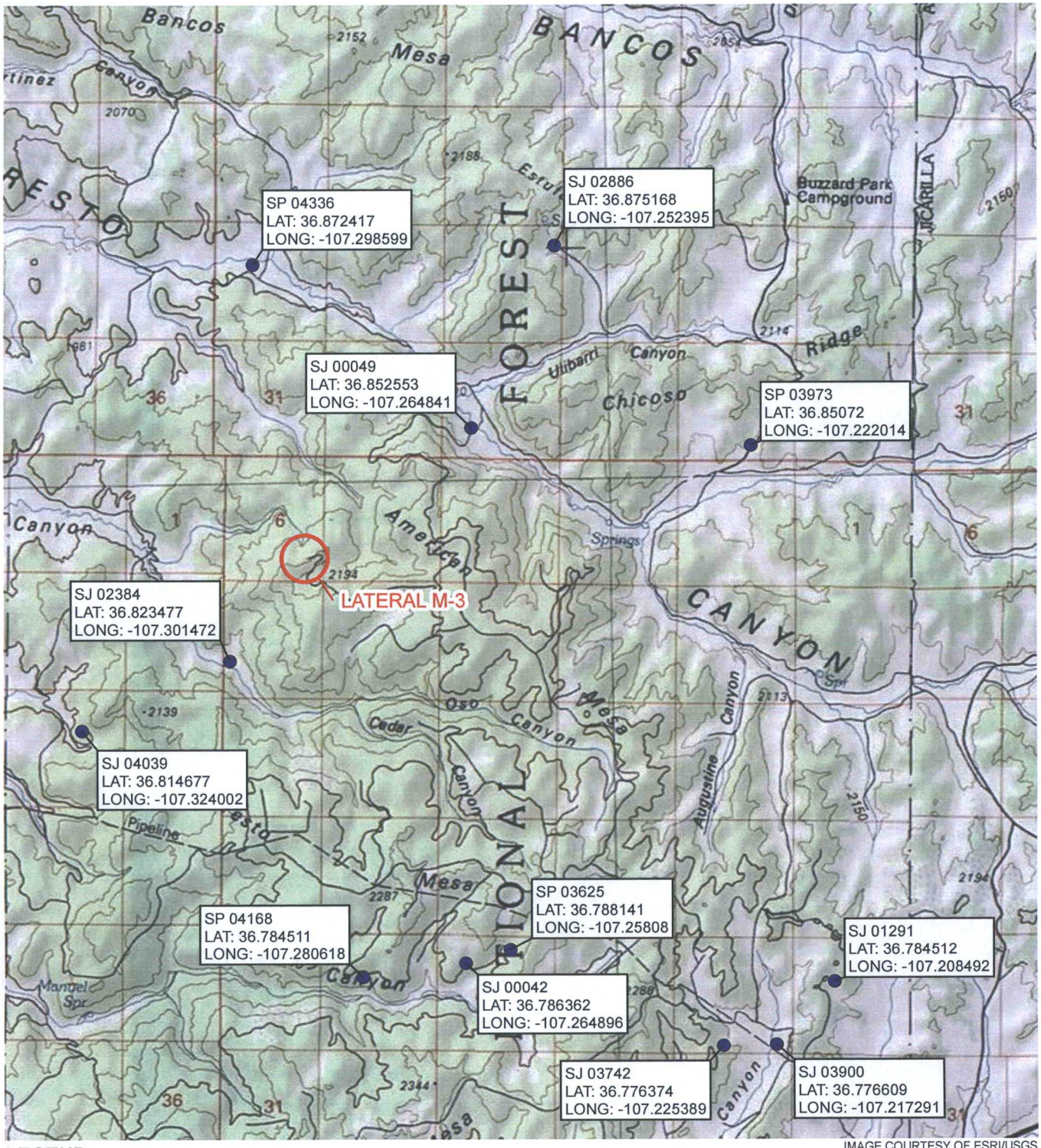


IMAGE COURTESY OF ESRI/USGS

LEGEND

- SITE LOCATION
- WATER WELL

0 6,000 12,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
LATERAL M-3
SESE SEC 6 T30N R4W
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Four Corners\GIS\MXD\090319029_LATERAL M-3\090319029_FIG01_SL_2019.mxd

ATTACHMENT 2

NMOSE Water Column Report

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW###### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

POD Number	POD Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00042		SJ	RA			1	28	30N	04W	297901	4073566*	62		
SJ 01291		SJ	RA		4	1	25	30N	04W	302930	4073243*	500	250	250
SJ 02384		SJ	RA	3	1	3	07	30N	04W	294736	4077762*	185	95	90
SJ 03742 POD1		SJ	RA	4	4	3	26	30N	04W	301401	4072375*	480	210	270
SJ 03900 POD1		SJ	RA	4	4	4	26	30N	04W	302124	4072384	380	200	180

Average Depth to Water: **188 feet**

Minimum Depth: **95 feet**

Maximum Depth: **250 feet**

Record Count: 5

PLSS Search:

Township: 30N **Range:** 04W

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00049		SJ	RA			3	33	31N	04W	298080	4080910*	112	80	32
SJ 02885			SJ	1	3	2	27	31N	04W			150		
SJ 02886		SJ	SJ	4	2	2	28	31N	04W	299249	4083393*	150		

Average Depth to Water: **80 feet**

Minimum Depth: **80 feet**

Maximum Depth: **80 feet**

Record Count: 3

PLSS Search:

Township: 31N **Range:** 04W

***UTM location was derived from PLSS - see Help**

ATTACHMENT 3

Field Map

ATTACHMENT 4

Site Map

LEGEND

EXCAVATION EXTENT

IMAGE COURTESY OF GOOGLE EARTH 2016

0 20 40

Feet

N

FIGURE 4
SITE MAP
LATERAL M-3
SESE SEC 6 T30N R4W
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Four Corners\GIS\MXD\090319029_LATERAL M-3\090319029_FIG02_SITE_2019.mxd

ATTACHMENT 5

Soil Analytical Results

TABLE 1
SOIL ANALYTICAL RESULTS
LATERAL M-3 LAUNCHER
INCIDENT NUMBER NVF1902432312
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

Sample Name	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Gasoline Range Organics (mg/kg)	Diesel Range Organics (mg/kg)	Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
Bottom	1/3/2019	<0.025	<0.050	<0.050	<0.099	<0.099	<5.0	<9.5	<47	<47	38
Sides	1/3/2019	<0.023	<0.047	<0.047	<0.094	<0.094	<4.7	<9.7	<49	<49	120
NMOCD Table 1 Closure Criteria		10	NE	NE	NE	50	1,000		NE	2,500	20,000

Notes:
bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - Not established
NMOCD - New Mexico Oil Conservation Division
TPH - total petroleum hydrocarbons
< - indicates result is below the laboratory reporting limit

ATTACHMENT 6

Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 11, 2019

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

RE: M-3 Launcher OrderNo.: 1901176

Dear Jesse Graham:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/5/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Bottom
Project: M-3 Launcher
Collection Date: 1/3/2019 3:38:00 PM
Lab ID: 1901176-001 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	38	30		mg/Kg	20	1/9/2019 12:00:18 PM	42508
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/9/2019 1:57:24 PM	42496
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/9/2019 1:57:24 PM	42496
Surr: DNOP	104	50.6-138		%Rec	1	1/9/2019 1:57:24 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/9/2019 6:14:52 PM	42491
Surr: BFB	90.4	73.8-119		%Rec	1	1/9/2019 6:14:52 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	1/9/2019 6:14:52 PM	42491
Toluene	ND	0.050		mg/Kg	1	1/9/2019 6:14:52 PM	42491
Ethylbenzene	ND	0.050		mg/Kg	1	1/9/2019 6:14:52 PM	42491
Xylenes, Total	ND	0.099		mg/Kg	1	1/9/2019 6:14:52 PM	42491
Surr: 4-Bromofluorobenzene	92.8	80-120		%Rec	1	1/9/2019 6:14:52 PM	42491

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: Sides
Project: M-3 Launcher
Collection Date: 1/3/2019 3:40:00 PM
Lab ID: 1901176-002 **Matrix:** SOIL **Received Date:** 1/5/2019 11:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	120	30		mg/Kg	20	1/9/2019 12:12:43 PM	42508
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/9/2019 2:19:19 PM	42496
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/9/2019 2:19:19 PM	42496
Surr: DNOP	107	50.6-138		%Rec	1	1/9/2019 2:19:19 PM	42496
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/9/2019 6:38:21 PM	42491
Surr: BFB	88.8	73.8-119		%Rec	1	1/9/2019 6:38:21 PM	42491
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/9/2019 6:38:21 PM	42491
Toluene	ND	0.047		mg/Kg	1	1/9/2019 6:38:21 PM	42491
Ethylbenzene	ND	0.047		mg/Kg	1	1/9/2019 6:38:21 PM	42491
Xylenes, Total	ND	0.094		mg/Kg	1	1/9/2019 6:38:21 PM	42491
Surr: 4-Bromofluorobenzene	90.4	80-120		%Rec	1	1/9/2019 6:38:21 PM	42491

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901176**

11-Jan-19

Client: Harvest
Project: M-3 Launcher

Sample ID **MB-42496**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1902954** 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	9.7		10.00		96.8	50.6	138			

Sample ID **LCS-42496**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **42496**	RunNo: **56853**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1902975** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	70	130			
Surr: DNOP	4.6		5.000		91.3	50.6	138			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901176**

11-Jan-19

Client: Harvest
Project: M-3 Launcher

Sample ID	**MB-42491**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903162**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.0	73.8	119			

Sample ID	**LCS-42491**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42491**			RunNo: **56872**					
Prep Date:	**1/8/2019**	Analysis Date: **1/9/2019**			SeqNo: **1903163**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80.1	123			
Surr: BFB	1100		1000		110	73.8	119			

Sample ID	**MB-42518**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42518**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904141**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	970		1000		97.3	73.8	119			

Sample ID	**LCS-42518**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42518**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904142**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	73.8	119			

Sample ID	**MB-42514**	SampType: **MBLK**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID: **42514**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904148**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		94.1	73.8	119			

Sample ID	**LCS-42514**	SampType: **LCS**			TestCode: **EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID: **42514**			RunNo: **56885**					
Prep Date:	**1/9/2019**	Analysis Date: **1/10/2019**			SeqNo: **1904149**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		110	73.8	119			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901176**

11-Jan-19

Client: Harvest
Project: M-3 Launcher

Sample ID **MB-42491**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **42491**	RunNo: **56872**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1903187** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.9	80	120			

Sample ID **LCS-42491**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **42491**	RunNo: **56872**
Prep Date: **1/8/2019**	Analysis Date: **1/9/2019**	SeqNo: **1903188** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.1	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **MB-42518**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **42518**	RunNo: **56885**
Prep Date: **1/9/2019**	Analysis Date: **1/10/2019**	SeqNo: **1904170** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			

Sample ID **LCS-42518**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **42518**	RunNo: **56885**
Prep Date: **1/9/2019**	Analysis Date: **1/10/2019**	SeqNo: **1904171** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **MB-42514**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **42514**	RunNo: **56885**
Prep Date: **1/9/2019**	Analysis Date: **1/10/2019**	SeqNo: **1904177** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		95.8	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1901176**

11-Jan-19

Client: Harvest

Project: M-3 Launcher

Sample ID **LCS-42514**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **42514**	RunNo: **56885**
Prep Date: **1/9/2019**	Analysis Date: **1/10/2019**	SeqNo: **1904178** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.0	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 LABORATORY

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

Sample Log-In Check List

Client Name: Harvest | Work Order Number: 1901176 | RcptNo: 1

Received By: Anne Thorne 1/5/2019 11:50:00 AM Anne Thorne

Completed By: Isaiah Ortiz 1/7/2019 2:59:46 PM I-Ort

Reviewed By: ENM 1/7/19

LB. DAD 1/7/19

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 1/7/19

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.3	Good	Yes			

Chain-of-Custody Record

Client: Harvest midstream

Mailing Address: 1755 arroyo dr.

Phone #:

email or Fax#: monica.sandoval, Kilan Hong

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: M-3 Launcher

Project #:

Project Manager: Jesse Graham

Sampler: Jesse Graham

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp (including CF): 1.7 CF 0.4 = 1.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1901176	BTEX / ~~MTBE / TMB's (8021)~~	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
1-3-19	3:38	soil	Bottom	4 oz	cool	-001	X	X					X			
1-3-19	3:40	soil	Sides	4 oz	cool	-002	X	X					X			

Analysis Request

Relinquished by:	Received by:	Via:	Date	Time
			1/3/19	1540
			1/3/19	1540
			01/05/19	1150

Remarks: cc jegrahan@harvestmidstream.com
sdean@harvestmidstream.com

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

ATTACHMENT 7

Photographic Log

DEERE

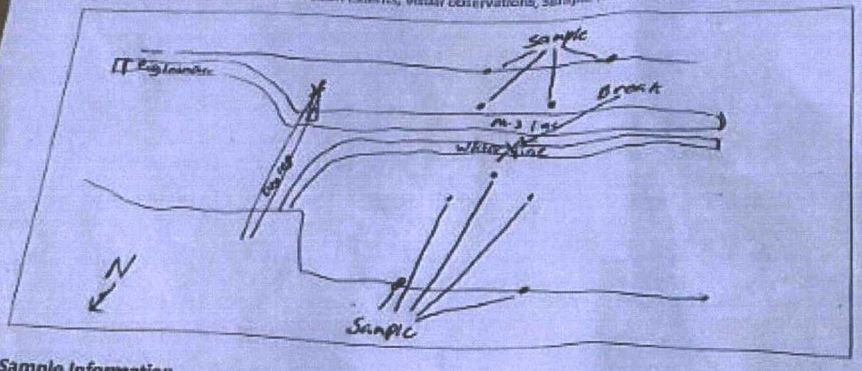
Remediation Excavation and Sampling Form

Site Name M-3 Pig launcher

Excavation Dimensions (feet)

25' Length 6', 10' Width 6' Depth

Excavation Diagram and Sample Locations
(Depict notable site features, excavation extents, visual observations, sample locations, north arrow, etc.)



Sample Information

OCD Witness Sampling Yes or (No)

Agency(s) Representative(s) Jesse Gradson

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
Bottom	1-3-19	Composite	Floor	
Sides	1-3-19	Composite	Sidewall	

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	3RP-1014
Facility ID	
Application ID	

Release Notification

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 36.643012 Longitude -107.354571
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Trunk L	Site Type Compressor Station
Date Release Discovered 12/14/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	28	28N	5W	Rio Arriba

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* _____)

NMOCD
APR 15 2019
DISTRICT III

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☒ Condensate	Volume Released (bbls) 22 BBLs into lined secondary containment.	Volume Recovered (bbls) 22
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (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.

62

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Thursday, May 2, 2019 2:09 PM
To: 'Kijun Hong'
Cc: bherb@ltenv.com; Joseph Pruitt; Lloyd Bell; 'tjones@harvestmidstream.com'; Powell, Brandon, EMNRD
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 <khong@harvestmidstream.com>
Sent: Thursday, May 2, 2019 10:52 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Cc: bherb@ltenv.com; Joseph Pruitt <jpruitt@harvestmidstream.com>; Lloyd Bell <lbell@harvestmidstream.com>
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 <khong@harvestmidstream.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Cc: bherb@ltenv.com; Joseph Pruitt <jpruitt@harvestmidstream.com>; Lloyd Bell <lbell@harvestmidstream.com>
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 <khong@harvestmidstream.com>
Sent: Wednesday, May 1, 2019 11:27 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Cc: bherb@ltenv.com; Joseph Pruitt <jpruitt@harvestmidstream.com>; Lloyd Bell <lbell@harvestmidstream.com>
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 <khong@harvestmidstream.com>
Cc: bherb@ltenv.com; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
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 <Vanessa.Fields@state.nm.us>
Sent: Tuesday, March 12, 2019 2:49 PM
To: Kijun Hong <khong@harvestmidstream.com>
Cc: bherb@ltenv.com; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
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 <khong@harvestmidstream.com>
Sent: Tuesday, March 12, 2019 1:30 PM
To: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>
Cc: bherb@ltenv.com
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.

Thank You,

Kijun

HARVEST MIDSTREAM

Kijun Hong | Harvest Midstream Company| Environmental Specialist | Four Corners
Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413

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

Initial Response

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

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

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

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

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 12/28/2018

email: khong@harvestmidstream.com Telephone: 505-436-8457

OCD Only

Received by: Date:

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NVF1900731813.
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong

Title: Environmental Specialist

Signature: _____

Date: 4/12/2019

email: khong@harvestmidstream.com

Telephone: 505-632-4475

OCD Only

Received by: _____

Date: _____

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 Chong Title: Environmental Specialist

Signature: Date: 4/12/2019

email: kchong@harvestmidstream.com Telephone: 505-632-4475

OCD Only

Received by: Cory Smith Date: 4/15/19

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

Signature: Date: 5/2/19

State of New Mexico
Oil Conservation Division

Incident ID	NVF1900731813.
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: _____ Date: 4/12/2019

email: khong@harvestmidstream.com Telephone: 505-632-4475

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

LT Environmental, Inc.
848 East Second Avenue
Durango, Colorado 81301
970.385.1096

April 12, 2019

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

RE: Closure Request
Trunk L Tank Battery
Incident Number NVF1900731813
Rio Arriba County, New Mexico

Dear Ms. Fields:

LT Environmental, Inc. (LTE), on behalf of Harvest Four Corners, LLC (Harvest), presents the following report detailing delineation of impacted soil at the Trunk L Tank Battery (Site) located in Unit A, Section 28, Township 28 North Range 5 West, in Rio Arriba County, New Mexico (Figure 1). The purpose of the drilling and soil sampling activities was to address impacts to soil after a release of condensate in the lined secondary containment.

On December 14, 2018, excessive liquids were received by the station during a pig run. Additionally, there was a high initial level in the slug catcher due to a stuck float valve. This caused a release of approximately 22 barrels (bbl) into the lined secondary containment. Approximately 22 bbls of free liquids were recovered by vacuum truck from the lined containment and the float valve was repaired. Harvest reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on December 28, 2018, and was assigned Incident Number NVF1900731813. Based on the delineation results, Harvest is requesting no further action for this release.

BACKGROUND

LTE characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to water data is SJ00047, located approximately 0.62 miles southwest of the Site (Figure 1). The water well has a depth to groundwater of 265 feet and a total depth of 465 feet. The water well is approximately 23 feet lower in elevation than the Site. A New Mexico Office of the State Engineers (NMOSE) water column report is included as Attachment 1. The nearest continuously flowing water or significant watercourse is an unnamed dry wash located 885 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than

300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. A small depression that appears to have been constructed as a stock pond is located approximately 275 feet southwest of the Site. Historical imagery suggests the pond was established sometime between October 1997 and July 2005. The pond appears to be fed by an upper order tributary of Gobernador Canyon and runoff from the oil and gas access road cut. Based on field evidence and historical imagery, the pond appears to only contain water after significant storm and snowmelt events. Several other ponds were constructed at the same time in the area. Based on historical imagery, the other ponds store water more consistently throughout the year and have evidence of a higher water line. Neither the pond in question nor the feeder tributary are mapped on the Fish and Wildlife Service Wetland Mapper. Based on this evidence, the pond is not a significant watercourse and 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 total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 10,000 mg/kg chloride.

LINER INSPECTION

Due to snow and ice accumulation, a preliminary liner inspection was delayed until February 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 bgs. Ten soil samples were collected from beneath the liner for field screening using a photoionization detector (PID). The PID results ranged from 187 parts per million (ppm) to 6,519 ppm. Further investigation and delineation of the release was delayed due to poor weather, road conditions, and continued pooling snow and water within the containment. As a result, Harvest requested an extension to the 90-day requirement for site characterization or closure reporting required in 19.15.29.11.A NMAC on March 12, 2019 via email. The NMOCD granted Harvest an extension to April 12, 2019.

HAND AUGER INVESTIGATION

On March 13 and 14, 2019, LTE personnel were onsite to conduct a hand auger delineation of impact to soil. Prior to LTE advancing boreholes within the containment area, Harvest contracted a vacuum truck to remove as much standing precipitation as practical. LTE advanced two boreholes within the containment area (BH01 and BH06) and one in each cardinal direction just outside the containment (BH02 through BH05). Each borehole was advanced to between 14 feet and 20 feet bgs. All soil sample locations were mapped using a handheld Global Positing System (GPS) unit and are depicted on Figure 2. Soil boring logs are included as Attachment 2. The soil samples were screened for volatile aromatic hydrocarbons using a PID. A soil sample was collected from the interval with the highest PID measurement and from the bottom of the borehole. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler, method of analysis, and immediately placed on ice. The soil

samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Hall Environmental Analytical Laboratories (Hall) in Albuquerque, New Mexico, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-motor oil range organics (MRO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Soil sample BH01@20' contained a concentration of 1,100 mg/kg GRO and 130 mg/kg DRO which exceeds the combined GRO/DRO NMOCD Table 1 closure criteria of 1,000 mg/kg. Laboratory analytical results for all other soil samples indicated benzene, total BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results for hand auger soil samples are summarized in Table 1 and the laboratory analytical reports are included in Attachment 3. Based on the BH01@20' soil sample analytical results, further delineation of impacted soil was required.

DELINEATION

On March 26, 2019 and April 8 and 9, 2019, LTE personnel returned to the Site to further delineate the impacted soil using a hollow stem auger drill rig. Borehole BH07 was advanced near the location of hand auger borehole BH01 to a depth of 40 feet bgs. Sandstone was encountered at about 21 feet bgs and at 40 feet bgs the drill rig encountered refusal. Boreholes BH08 through BH11 were advanced to 42 feet bgs in each cardinal direction outside the containment area.

The soil borings were logged by an LTE geologist who inspected the soil for the presence or absence of petroleum hydrocarbon odor and/or staining. The soil was characterized by visually inspecting the soil samples and field screening the soil headspace using a PID to monitor for the presence of volatile organic vapors. Two soil samples from each soil boring were submitted for laboratory analysis: the most impacted sample based on field screening techniques and the terminus of the borehole. All soil samples were collected and analyzed as described above. Borehole locations are depicted on Figure 2 and soil boring logs are included as Attachment 2.

ANALYTICAL RESULTS

Borehole BH07 was advanced in the same location of as BH01, and contained a concentration of GRO/DRO of 1,310 mg/kg at approximately 8 to 10 feet bgs, but the sample collect from the bottom of the borehole at 40 feet bgs was complaint with NMOCD Table 1 closure criteria. Laboratory analytical results for all other soil samples indicated benzene, total BTEX, GRO/DRO, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 2.

CONCLUSIONS

Harvest retained LTE to conduct a delineation of impact to soil below the lined containment. Based on field screening and laboratory analytical results, impact to soil by hydrocarbons were observed in BH01 and BH07 in the center of the containment from approximately 6 feet to 25 feet bgs. Field screening and laboratory analytical results indicate concentrations of hydrocarbons (BTEX, GRO+DRO, and TPH) exceeding Table 1 closure criteria were not observed in any other boreholes. Soil exceeding Table 1 Closure Criteria has been delineated laterally by BH-8 through BH-11 and vertically with BH-7. Based on the size of the containment and a depth of approximately 19 feet documented in BH-7, LTE estimates that less than 2,000 cubic yards of impacted soil exist.

Based on active site operations, Harvest requests to defer remediation of impacted soil until the tanks and the pipelines are removed from service. LTE and Harvest do not believe deferment will result in imminent risk to human health, the environment, or groundwater. Free-standing fluids were recovered during initial response activities and no saturated soil remains in place. The impacted soil remaining in place under the lined containment is delineated vertically and laterally by soil samples collected from boreholes BH02 through BH06 and BH08 through BH11. No significant watercourse exists within 800 feet of the impacted soil and groundwater is greater than 100 feet deep. Detected concentrations of GRO + DRO were identified in the two boreholes in the center of the containment at 1,230 mg/kg and 1,310 and only minimally exceed Table 1 closure criteria of 1,000 mg/kg.

Harvest requests no further action for incident number NVF1900731813. Upon approval of this closure request, Harvest will replace the liner in the containment area. Capping the residual impact will prevent vertical migration of the elevated hydrocarbons. An updated NMOCD Form C-141 is included as a cover to this report. A photographic log of the Site is included as Attachment 4.

If you have any questions or comments, please do not hesitate to contact Ms. Brooke Herb at (970) 385-1096 or bherb@ltenv.com.

Sincerely,

LT ENVIRONMENTAL, INC.

Brooke Herb
Project Geologist

Ashley L. Ager, P.G.
Senior Geologist

cc: Cory Smith, NMOCD

Attachments:

Figure 1 Site Location Map
Figure 2 Soil Analytical Results
Table 1 Soil Analytical Results
Attachment 1 NMOSE Water Column Report
Attachment 2 Soil Boring Logs
Attachment 3 Laboratory Analytical Reports
Attachment 4 Photographic Log

FIGURES

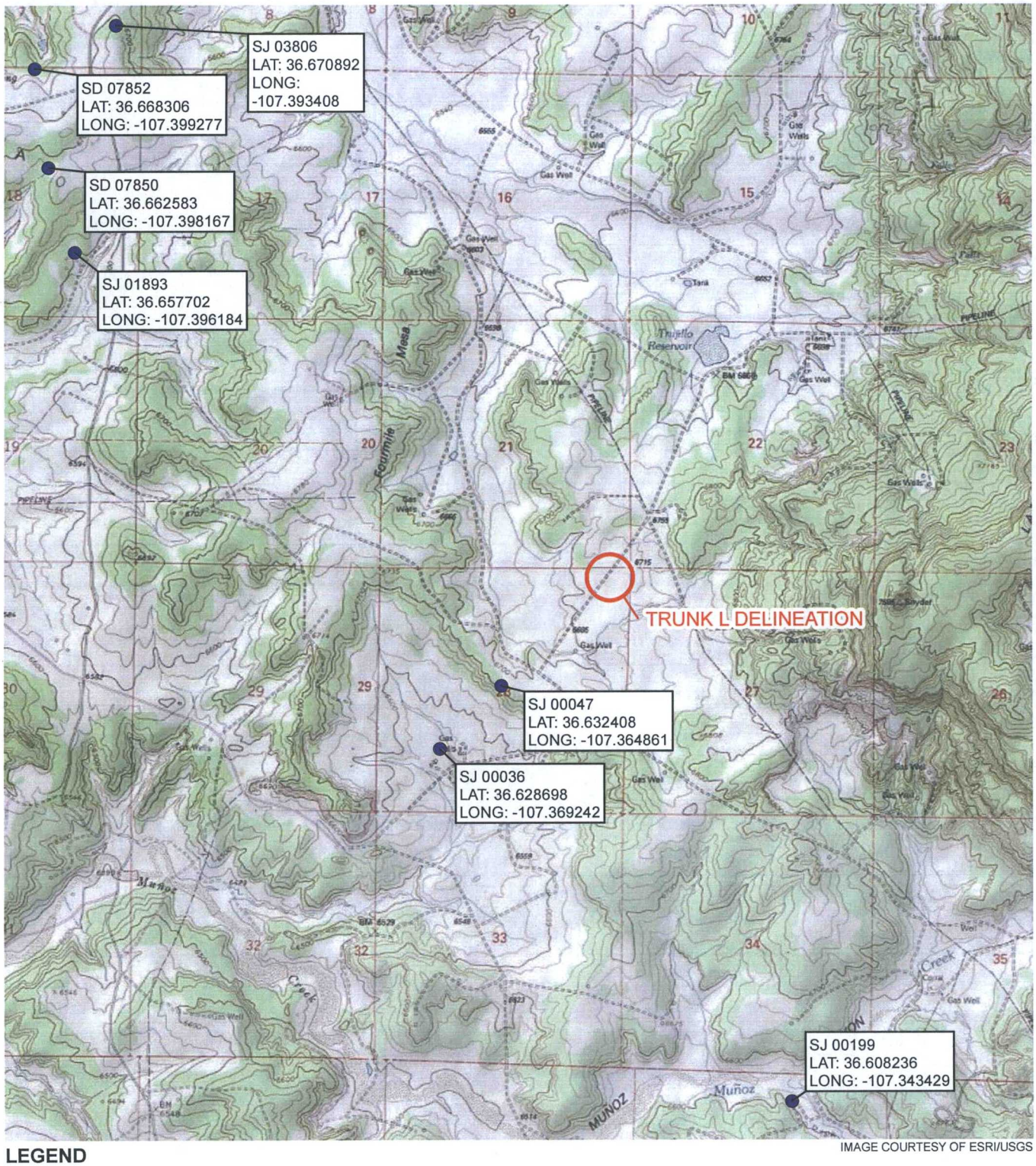


IMAGE COURTESY OF ESRI/USGS

LEGEND

- SITE LOCATION
- WATER WELL

0 3,000 6,000

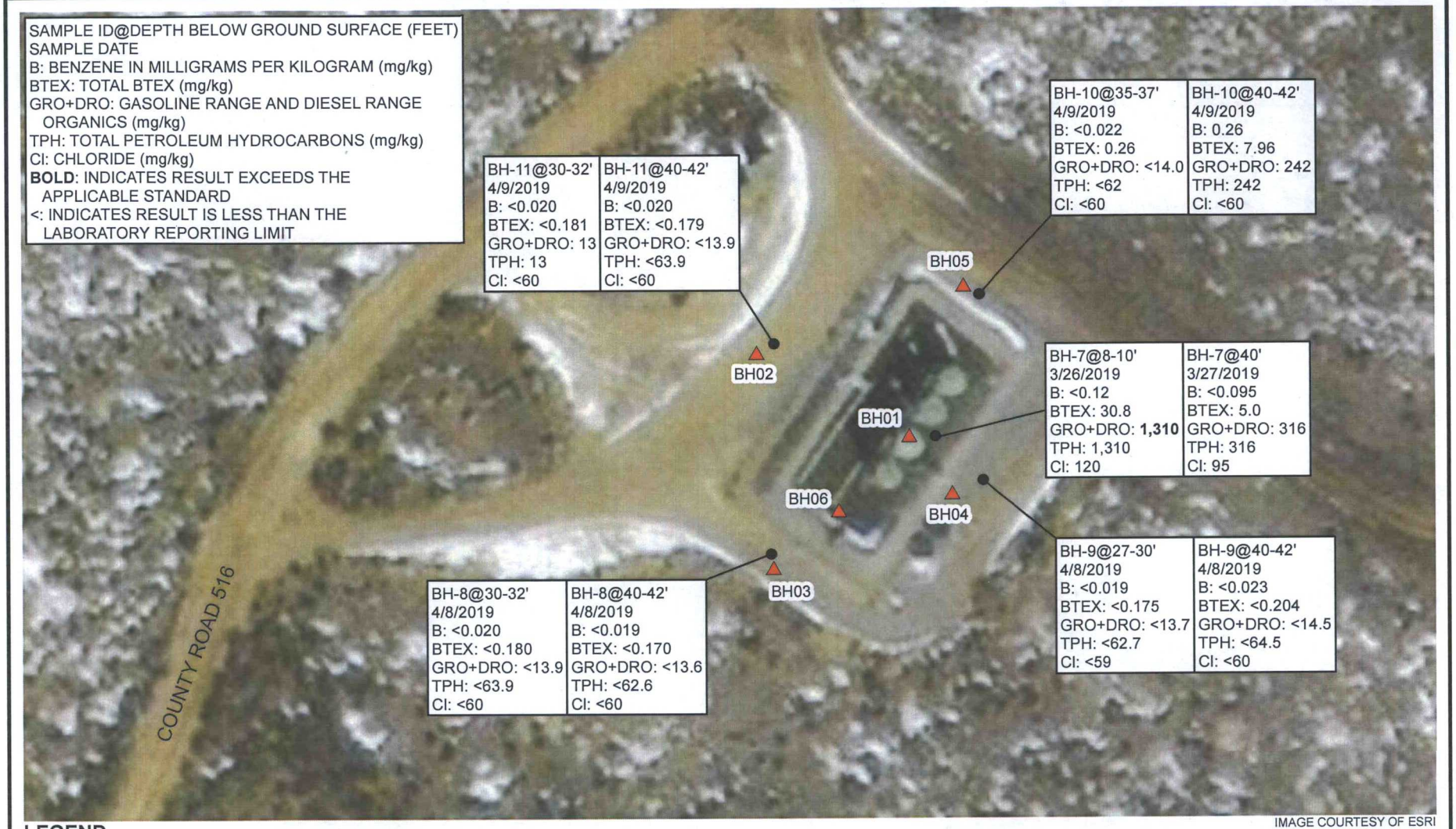
Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
TRUNK L DELINEATION
NENE SEC 28 T28N R5W
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Four Corners\GIS\MXD\090319022_TRUNK L\090319022_FIG01_SL_2019.mxd



LEGEND

- ● HOLLOW-STEM BOREHOLE
- ▲ HAND AUGER BOREHOLE

0 60 120
Feet

N

FIGURE 2
SOIL ANALYTICAL RESULTS
TRUNK L DELINEATION
NENE SEC 28 T28N R5W
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Four Corners\GIS\MXD\090319022_TRUNK L\090319022_FIG02_SOIL_ANALY_APR_2019.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

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

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														
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														
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
NMOCD Table 1 Closure Criteria				**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: NMOSE WATER COLUMN REPORT

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00036		SJ	RA		3		28	28N	05W	288156	4056298*	303	243	60
SJ 00047		SJ	RA				28	28N	05W	288558	4056700*	465	265	200
SJ 01893		SJ	RA		4		18	28N	05W	285827	4059576*	390	290	100

Average Depth to Water: **266 feet**

Minimum Depth: **243 feet**

Maximum Depth: **290 feet**

Record Count: 3

PLSS Search:

Township: 28N **Range:** 05W

***UTM location was derived from PLSS - see Help**

ATTACHMENT 2: SOIL BORING LOGS

N

LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH01	Project: Trunk L Delineation
Date: 3/14/19	Project Number:
Logged By: Mary Mrdjenovich	Drilled By: MM
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: ~~10-20 Silica Sand~~	Seal:	Grout:
Casing Type: ~~Schedule 40 PVC~~	Diameter: 2"	Length:	Hole Diameter: 4"	Depth to Liquid:
Screen Type: ~~Schedule 40 PVC~~	Slot: 0.010"	Diameter: 2"	Length:	Total Depth: 20	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	20.8	N		0			SC	Sandy clay, dark brown, no, m. dense	
					1					
	D	2.1	N		2			SW	Sand, brown loose, no water perched above clay @ 3'	
					3					
	S	2175	N		4			SW-CC	Sandy clay w/ clay layers, grayish-brown, dense, Diesel odor	
					5					
	M	2196	N	BH01 @ 6'	6			SC	*smells of pig manure when augering Sandy clay w/ silt, black/gray color, Diesel odor w/ manure loose	
					7					
	M	1989	N		8			SC	Sandy clay, dark brown, m. dense, diesel/manure odor	
					9					
	M	1888	N		10			SC	saa	
					11					
					12			SW	Well-graded Sand w/ clay < 35% dark brown, loose, diesel/manure odor	
	M	1852	N		13					
					14			SW	saa	
	M	1818	N		15					

LTE Advancing Opportunity

Boring/Well #	BH01
Project:	Trunk L
Project #	
Date	3/14/19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					15					
	M	1919	N		16			SW	well-graded Sand w/silt, trace clay <20% 15%, loose diesel/moisture odor, brown	
					17					
	M	1670	N		18			SW	saa, clay <10%	
					19					
	M	1910	N	BH01 @ 20'	20			SW	saa	
					21					
					22					
					23				TD 20'	
					24					
					25					
					26					
					27					
					28					
					29					
					30					
					31					
					32					
					33					
					34					
					35					
					36					
					37					

N

LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: ~~BH2~~ BH02	Project: Trunk L Delineation
Date: 3/13/19	Project Number:
Logged By: Mary Medjenovich	Drilled By: MM
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: ~~10-20 Silica Sand~~	Seal:
Grout:	
Casing Type: ~~Schedule 40 PVC~~	Diameter: ~~2"~~ Length:
Hole Diameter: 4"	Depth to Liquid:
Screen Type: ~~Schedule 40 PVC~~ Slot: ~~0.010"~~	Diameter: ~~2"~~ Length:
Total Depth: 15'	Depth to Water:

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	0.2	N	BH02 @ 0.5'	0			SC	Sandy Clay, dark brown, dense ~~no~~ NS, no	
					1					
	M	0.1	N		2			SW-CL	Sand ~~with trace~~ clay <30%, no	
					3				dark brown, m. dense	
	M	0.1	N		4			SW	Sand, trace clay/silt <15%,	
					5				no, dark brown	
	M	0.1	N		6			SW	saa, loose	
					7					
	M	0.0	N		8			SW	saa	
					9					
	M	0.0	N		10			SW	saa w/ clay layers	
					11					
	M	0.0	N		12			SW	saa	
					13					
	M	0.0	N		14			SW	saa	
	M	0.0	N	BH02 @ 15'	15			SW	saa	

TD 15'

N

LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH03	Project: Trunk C Delineation
Date: 3/13/19	Project Number:
Logged By: Mary Mrdjenovich	Drilled By: MM
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: ~~10-20 Silica Sand~~	Seal:
Grout:	
Casing Type: ~~Schedule 40 PVC~~	Diameter: ~~2"~~ Length:
Hole Diameter: 4"	Depth to Liquid:
Screen Type: Schedule 40 PVC	Slot: ~~0.010"~~ Diameter: ~~2"~~ Length:
Total Depth: 15'	Depth to Water:

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	0.9	N	BH03 @ 0.5'	0			SW-SC	Sand w/ silt & clay, ~35%, dark brown w/ yellow staining, trace gravel, <15%, dense, no	
					1					
	D	0.1	N		2			SW	Sand, trace silt <10%, brown, no, loose	
					3					
	~~MD~~	0.3	N		4			SW	Sand, brown, loose, no	
					5					
	D	0.0	N		6			SM	Silty Sand, brown, loose, no	
					7					
	D	0.0	N		8			SM	saa	
					9					
					10			SM	saa, trace gravel, <10%	
					11					
	D	0.0	N		12			SM	saa	
					13					
					14					
	M	0.1	N	BH03 @ 15'	15			SM	saa	

TD 15'

N

LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH04	Project: Trunk L
Date: 3/13/2019	Project Number:
Logged By: E. Carroll	Drilled By: LTE
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: 10-20 Silica Sand	Seal:
Grout:	
Casing Type: Schedule 40 PVC	Diameter: 2" Length:
Hole Diameter: 4"	Depth to Liquid:
Screen Type: Schedule 40 PVC Slot: 0.010"	Diameter: 2" Length:
Total Depth: 15'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	wet	0.1	No		0				loose, dark brown, sand, some silt <30%, no stain, no odor	
					1					
	moist	0.5	No		2					
					3					
	moist	0.7	No	BH04 @4'	4				SAA	
					5					
	moist	0.4	No		6				very loose, lt brown, med coarse sand, trace silt <10% no stain/odor	
	moist	0.4	No		7					
					8				Dense, dark brown, clayey sand no stain/odor	
					9					
	moist	0.2	No		10				SAA	
					11					
	moist	0.2	No		12				loose, lt yellow brown, coarse sand, trace silt/clay <15% no stain/odor	
					13					
					14					
	moist	0.1	No	BH04 @15'	15					

TD 15'

N

LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH05	Project: Trunk L
Date: 3/13/2019	Project Number:
Logged By: EC	Drilled By: LTE
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: 10-20 Silica Sand	Seal:	Grout:
Casing Type: Schedule 40 PVC	Diameter: 2"	Length:	Hole Diameter: 4"	Depth to Liquid:
Screen Type: Schedule 40 PVC	Slot: 0.010"	Diameter: 2"	Length:	Total Depth: 15'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	wet	0.2	NA		0				Compact, dark brown, silty clay, trace sand < 10% no stain, no odor	
					1					
	wet	0.4	ND		2					
					3					
	wet	0.4	ND		4				SAA	
					5					
	moist	0.7	ND	BH05 @ 6'	6				Compact, dark brown, sandy clay, no stain/odor	
					7					
	moist	0.5	NP		8				SAA	
					9					
	moist	0.2			10				SAA	
					11					
	moist	0.3			12				SAA	
					13					
					14					
	moist	0.2		BH05 @ 15'	15				SAA	

TD 15'

N

LTE Advancing Opportunity

848 E. 2nd Ave
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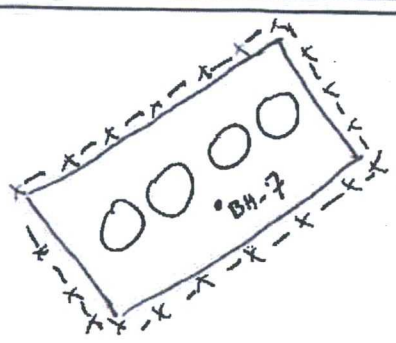
BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH06	Project: Trunk L
Date: 3/14/19	Project Number:
Logged By: Mary Mrdjenovich	Drilled By: MM
Elevation:	Detector: PID
Drilling Method: Hand Auger	Sampling Method: Grab
Gravel Pack: ~~10-20 Silica Sand~~	Seal:
Casing Type: ~~Schedule 40 PVC~~	Diameter: 2" Length: ~~5ft~~
Screen Type: Schedule 40 PVC	Slot: ~~0.010"~~ Diameter: 2" Length:
Grout:	Hole Diameter: 6"
Depth to Liquid:	Total Depth: 15
Depth to Water: NA	

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M	61.4	N		0			SC	Sandy clay, dark brown, no, dense	
					1					
	M	51.2	N		2			SW	Sand, trace clay <20%, brown, dense, no	
	D	23.7	N		3					
					4			SW	saa	
					5					
	D	273.5	N	BH06 @ 6'	6			SW-SM	Sand w/ silt, brown, loose, no	
					7					
	D	43.3	N		8			SW-SM	saa	
					9					
	D	89.7	N		10			SW	Sand, trace clay, <15%, brown, m. dense, no	
					11					
	D	140.9	N		12			SW	saa	
					13					
	M/S	7.6	N	BH06 @ 14	14			SW-SC	Sa. Sand w/ clay <40%, brown, m. dense, no	
					15					



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LTE Advancing Opportunity

848 E. 2nd Ave
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH-7	Project: Trunk L
Date: 3-26-2019	Project Number: 090319022.002
Logged By: J. Adams	Drilled By: Geomat Engineering
Elevation: 6,720 ft	Detector: PID
Drilling Method: Hollow Stem Auger	Sampling Method: Continuous ~~Split Spoon~~
Gravel Pack: ~~10-20 Silica Sand~~	Seal: NA
Grout: NA	
Casing Type: ~~Schedule 40 PVC~~	Diameter: ~~2"~~ Length:
Hole Diameter: 6"	Depth to Liquid: NA
Screen Type: ~~Schedule 40 PVC~~ Slot: ~~0.010"~~	Diameter: ~~2"~~ Length:
Total Depth: 40'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR	NR		0 1 2	0 to 5				No well installed
	moist	0.8	NO		3 4 5			SC	brown/dark) clayey sand cohesive, semi-plastic	
		NR	NR		6	5 to 10			grey/brown/black lean clay cohesive, semi-plastic, slight HC odor	
	M	2106	Yes black/grey		7 8			CL		
	M	2359	YES black/grey		9 10				SAA	
		NR	NR		11 12					
	M	1728	YES grey/black		13 14 15			SC	grey/black/brown clayey sand cohesive, semi-plastic	

LTE Advancing Opportunity

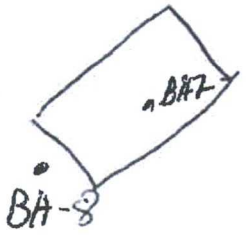
Boring/Well #	BH-7
Project:	Trunk L Tank Battery
Project #	
Date	3-26-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					15					
					16	15-16				
	M	1883	YES grey/blk		17			SC	SAA	
					18				≈19' lithology becomes more dense, switch to split spoon.	
					19					
					20				NR	
					21					
					22					
	D	1809	Slight grey		23	22-23		SP	light brown poorly graded sand (rubbelized SS) HCodor	
				R	24	NR	X			
	D	2183	No		25	24-25		SP	SAA strong HCodor	
					26					
					27					
					28					
					29				lt brown, poorly graded, coarse sand, rust mottling, Strong HC odor	
	Dry	1305	No		30	29-30		SP		
					31					
					32				lt reddish brown, poorly sorted, med-fine sand, no stain, Strong odor	
	Dry	1150	No		33	33-34		SP		
					34					
					35					
	Dry	1430	No		36	36-37		SP	SAA, Strong odor	
					37					

LTE Advancing Opportunity

Boring/Well #	BH07
Project:	Trunk L
Project #	0903190022
Date	3/27/2019

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					37					
	Dry	1981	No	BH07 @40'	38 39 40	39-40'		SP	SAA, Strong odor	
					41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59				TD = 40' Stopped drilling due to refusal	



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LTE Advancing Opportunity

848 E. 2nd Ave
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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH-8	Project: Trunk L
Date: 4-8-2019	Project Number: 090319022.002
Logged By: J. Adams	Drilled By: Geomat Engineering
Elevation: 6,720 ft	Detector: PID
Drilling Method: Hollow Stem Auger	Sampling Method: Continuous/Split Spoon
Gravel Pack: ~~10-20 Silica Sand~~	Seal:	Grout:
Casing Type: Schedule 40 PVC	Diameter: 2" Length:	Hole Diameter: 10"	Depth to Liquid: NA
Screen Type: Schedule 40 PVC	Slot: ~~0.010"~~	Diameter: 2" Length:	Total Depth: 42'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR			0–3					NO well
	Dry	1.1	NO		4–5	1-5'		ML	brown silt w/sand, low plasticity & low cohesion	
			NR		6				NR	
	Dry	2.0	NO		7–8	5-10'		ML	SAA	
	Dry	1.8	NO		9–10	5-10		ML	SAA, more cohesive	
			NR		11					
	Dry	1.5	NO		12–13	10-15		SM	Brown silty sand, low plast. low cohesion	
	Dry	0.5	NO		14–15	10-15		SM		

Advancing Opportunity

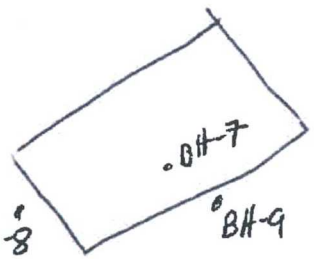
Boring/Well #	BH-8
Project:	TRUNK 2
Project #	4-8-19
Date	↓

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	Dry	0.8	NO		15 16 17 18	15-20		ML	brown silt w/ sand, med. plasticity & cohesion	
	Dry	0.6	NO		19 20	15-20		SM	brown silty sand, low plasticity & cohesion	
	Dry	0.6	NO		21 22	20-24		SM	SAA	
	Dry	0.7	NO		23 24	20-24		SM	SAA	
		NR			25 26 27 28 29 30				lithology becomes more compact, sandstone switch to split-spoon split-spoon ↓	
	Dry	34.3	NO	BH-8 @ 30-32 1/60	31 32	30-32		SM	brown silty sand, low plasticity & cohesion	
		NR			33 34 35					
	Dry	21.3	NO		36 37	35-37		SM	SAA	

LTE Advancing Opportunity

Boring/Well #	BH-8
Project:	Trunk L
Project #	
Date	4-8-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					37					
		NR			38					
					39					
					40					
	dry	10.9	ND	BH-8 40-42 1130	41	40-42		Sm	SAA	
					42					
					43				TDe 42'	
					44					
					45					
					46					
					47					
					48					
					49					
					50					
					51					
					52					
					53					
					54					
					55					
					56					
					57					
					58					
					59					



LTE Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH-9	Project: Trunk L
Date: 4-8-2012	Project Number: 090319022.002
Logged By: J. Adams	Drilled By: Geomat Engineering
Drilling Method: Hollow Stem Auger	Sampling Method: Continuous/Split Spoon
Seal:	Grout:
Elevation: 6,720 ft	Detector: PID
Gravel Pack: ~~10-20 Silica Sand~~	
Casing Type: Schedule 40 PVC	Diameter: 2" Length:
Screen Type: ~~Schedule 40 PVC~~	Slot: ~~0.010"~~ Diameter: 2" Length:
Hole Diameter: 6"	Depth to Liquid: NA
Total Depth: 42'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR	NR		0 1 2 3	0-5				NO well
	dry	3.8	NO		4 5	0-5		SM	light brown silty sand low plas & cohesion	
		NR	NR		6 7	5-10				
	dry	0.7	NO		8 9 10	5-10		SC	brown clayey sand med. plas & cohesion	
		NR	NR		11 12					
	dry	1.5	NO		13 14 15	10-15		SM	light brown silty sand low plas. & cohesion	

LTE Advancing Opportunity

Boring/Well #	BH-9
Project:	Trunk L
Project #	
Date	4-8-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR			15 16					
	dry	4.0	NO		17 18	15-20		SM	SAA	
	M	0.8	NO		19 20	15-20		CL	brown lean clay w/sand high plas + cohesion	
	M	27.0	NO		21 22 23	20-25		ML	brown silt w/sand med. plas + cohesion	
	M	26.5	NO		24 25	20-25		ML	SAA	
		NR			26 27					
	Dry	38.2	NO	BH-9 27-30 1430	28 29 30	25-30		SM	light brown silty sand low plas + cohesion	
	Dry	26.2	NO		31 32	30-34		SM	SAA	
	Dry	24.9	NO		33 34	30-34		SM	SAA lithology more compact @ 34' switch to split spoon	
		NR			35 36 37					

Advancing Opportunity

Boring/Well #	BH-9
Project:	Trunk L
Project #	
Date	4-8-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					37					
		NA			38					
					39					
					40					
	Dry	220	NO	BH-9 @ 40-42' 1435	41			SP-SM	poorly graded sand w/ trace silt; fat staining (sandstone)	
					42				TD @ 42'	
					43					
					44					
					45					
					46					
					47					
					48					
					49					
					50					
					51					
					52					
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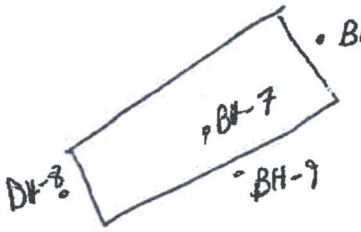
					54					
					55					
					56					
					57					
					58					
					59					



Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH-10		Project: Trunk L	
Date: 4-8-2019/4-9-19		Project Number: 090319022.002	
Logged By: J. Adams		Drilled By: Geomat Engineering	
Elevation: 6,720 ft	Detector: PID	Drilling Method: Hollow Stem Auger	Sampling Method: Continuous/Split Spoon
Gravel Pack: ~~10-20 Silica Sand~~		Seal:	Grout:
Casing Type: ~~Schedule 40 PVC~~		Diameter: 2" Length:	Hole Diameter: 6" / Depth to Liquid: NA
Screen Type: ~~Schedule 40 PVC~~ Slot: ~~0.010"~~		Diameter: 2" Length:	Total Depth: 42' / Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
			NR		0 1 2		X			ND well
	M	1.2ppm	NO		3 4 5	0-5'		ML	Brown Silt w/ sand med. plas & cohesion	
		NR			6	5-10	X	X		
	dry	1.0	NO		7 8	5-10		SM	light brown silty sand low plas & cohesion poorly graded sand	
	M	0.2	NO		9 10	5-10		CL	brown lean clay, high plas & cohesion	
		NR			11 12 13	10-15	X			
	M	0.3	NO		14 15	10-15		SM	brown silty sand low plas & cohesion	

Advancing Opportunity

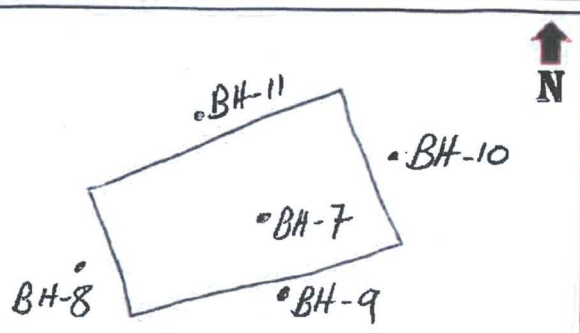
Boring/Well #	BH-10
Project:	Trunk L
Project #	
Date	4-8-19 & 4-9-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
	M		NO		15 16			SM	SAA	
	M	62.6	NO		17 18 19 20			SP-SM	encountered sandstone @ 16.5' Fe+ stain, poorly graded sand, sub-angular TD for 4-8 @ 16.5'	
		NR								
	DRY	167.8	NO		21 22	20-22		SP-SM	SAA	
				NR	23 24 25					
	DRY	1820	NO		26 27	25-27		SP-SM	SAA	
		NR			28 29 30					
	DRY	194.1	NO		31 32	30-32		SP-SM	SAA	
		NR			33 34 35					
	DRY	37.4	NO	BH-10 35-37' 1030	36 37	35-37		SP-SM	SAA	

LTE Advancing Opportunity

Boring/Well #	BH-10
Project:	Trunk L
Project #	
Date	4-4-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					37					
		NR			38					
					39					
					40					
	DRY	4042	NO	BH-10 @ 40-42 1035	41				SAA, slight odor	
					42					
					43					
					44					
					45					
					46					
					47					
					48					
					49					
					50					
					51					
					52					
					53					
					54					
					55					
					56					
					57					
					58					
					59					



Advancing Opportunity

848 E. 2nd Ave
Durango, Colorado 81301

BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BH-11	Project: Trunk L
Date: 4-9-2019	Project Number: 090319022.002
Logged By: J. Adams	Drilled By: Geomat Engineering
Elevation: 6,720 ft	Detector: PID
Drilling Method: Hollow Stem Auger	Sampling Method: Continuous/Split Spoon
Gravel Pack: ~~10-20 Silica Sand~~	Seal:
Grout:	
Casing Type: Schedule 40 PVC	Diameter: 2" Length:
Hole Diameter: 6"	Depth to Liquid: NA
Screen Type: Schedule 40 PVC	Slot: 0.010" Diameter: 2" Length:
Total Depth: 42'	Depth to Water: NA

Penetration Resistance	Moisture Content	Vapor (ppm)	HC Staining?	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR	NR		0 1 2	0-5	X			NO WELL
	M	1.2	NO		3 4 5	0-5	≈	ML	brown silt w/sand med. plas + cohesion	
		NR	NR		6 7 8	5-10	X			
	M	3.4	NO		9 10	5-10	≈	SC	brown clayey sand med plas. low cohesion	
		NR	NR		11 12					
	M	3.7	NO		13 14 15	10-15		SM	brown silty sand low plas + cohesion	

sandstone @ 15' switch to split-spoon

LTE Advancing Opportunity

Boring/Well #	BH-11
Project:	Trunk L
Project #	
Date	4-9-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
		NR			15 16 17 18 19 20					
	Dry	1.3	NO		21 22	20-22		SP	poorly-graded sand Fe staining	
		NR			23 24 25					
	Dry	15.2	NO		26 27	25-27		SP	SAA	
		NR			28 29 30					
	Dry	24.8	NO	BH-11 @ 30-32' BAO	31 32			SP	SAA	
		NR			33 34 35					
	Dry	22.5	NO		36 37			SP	SAA	

LTE Advancing Opportunity

Boring/Well #	BH-11
Project:	Trunk L
Project #	
Date	4-9-19

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery	Soil/Rock Type	Lithology/Remarks	Well Completion
					37					
	NR				38					
					39					
					40					
	dry	21.4	No	BH-11 @ 40-42' 13:45	41			SP	SAA	
					42				TD @ 42'	
					43					
					44					
					45					
					46					
					47					
					48					
					49					
					50					
					51					
					52					
					53					
					54					
					55					
					56					
					57					
					58					
					59					

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH02 @ 0.5'
Project: Trunk L Delineation
Collection Date: 3/13/2019 11:30:00 AM
Lab ID: 1903784-001
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 5:58:45 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline 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 METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/19/2019 9:39:16 AM	43721
Motor Oil 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 METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	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
Ethylbenzene	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

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH02 @ 15'
Project: Trunk L Delineation
Collection Date: 3/13/2019 12:00:00 PM
Lab ID: 1903784-002
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 6:11:10 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						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: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/19/2019 10:25:00 AM	43721
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 SHORT 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L Delineation
Lab ID: 1903784-003
Matrix: MEOH (SOIL)
Client Sample ID: BH03 @ 0.5'
Collection Date: 3/13/2019 1:06:00 PM
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 6:23:34 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	3/18/2019 4:29:02 PM	G58448
Surr: BFB	104	70-130		%Rec	1	3/18/2019 4:29:02 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/19/2019 10:46:55 AM	43721
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2019 10:46:55 AM	43721
Surr: DNOP	115	70-130		%Rec	1	3/19/2019 10:46:55 AM	43721
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.015		mg/Kg	1	3/18/2019 4:29:02 PM	SLS5844
Toluene	ND	0.031		mg/Kg	1	3/18/2019 4:29:02 PM	SLS5844
Ethylbenzene	ND	0.031		mg/Kg	1	3/18/2019 4:29:02 PM	SLS5844
Xylenes, Total	ND	0.061		mg/Kg	1	3/18/2019 4:29:02 PM	SLS5844
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	1	3/18/2019 4:29:02 PM	SLS5844
Surr: Toluene-d8	99.1	70-130		%Rec	1	3/18/2019 4:29:02 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L Delineation
Lab ID: 1903784-004
Matrix: MEOH (SOIL)
Client Sample ID: BH03 @ 15'
Collection Date: 3/13/2019 1:50:00 PM
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 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 RANGE ORGANICS						Analyst: **lrm**	
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 SHORT 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	93.6	70-130		%Rec	1	3/18/2019 4:57:46 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH04 @ 4'
Project: Trunk L Delineation
Collection Date: 3/13/2019 11:20:00 AM
Lab ID: 1903784-005
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 6:48:23 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	3/18/2019 5:26:25 PM	G58448
Surr: BFB	101	70-130		%Rec	1	3/18/2019 5:26:25 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/19/2019 11:30:59 AM	43721
Motor Oil 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 METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	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
Ethylbenzene	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

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH04 @ 15'
Project: Trunk L Delineation
Collection Date: 3/13/2019 11:40:00 AM
Lab ID: 1903784-006
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 RANGE						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: **lrm**	
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

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L Delineation
Lab ID: 1903784-007
Matrix: MEOH (SOIL)
Client Sample ID: BH05 @ 6'
Collection Date: 3/13/2019 1:30:00 PM
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 7:38:00 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	3/18/2019 6:23:33 PM	G58448
Surr: BFB	100	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)	ND	9.9		mg/Kg	1	3/19/2019 10:01:56 AM	43721
Motor Oil Range Organics (MRO)	ND	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: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.016		mg/Kg	1	3/18/2019 6:23:33 PM	SLS5844
Toluene	ND	0.032		mg/Kg	1	3/18/2019 6:23:33 PM	SLS5844
Ethylbenzene	ND	0.032		mg/Kg	1	3/18/2019 6:23:33 PM	SLS5844
Xylenes, Total	ND	0.065		mg/Kg	1	3/18/2019 6:23:33 PM	SLS5844
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	3/18/2019 6:23:33 PM	SLS5844
Surr: Toluene-d8	93.7	70-130		%Rec	1	3/18/2019 6:23:33 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH05 @ 15'
Project: Trunk L Delineation
Collection Date: 3/13/2019 2:00:00 PM
Lab ID: 1903784-008
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 7:50:25 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	3/18/2019 6:51:58 PM	G58448
Surr: BFB	99.7	70-130		%Rec	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/Kg	1	3/19/2019 10:25:44 AM	43721
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/19/2019 10:25:44 AM	43721
Surr: DNOP	97.8	70-130		%Rec	1	3/19/2019 10:25:44 AM	43721
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.017		mg/Kg	1	3/18/2019 6:51:58 PM	SLS5844
Toluene	ND	0.033		mg/Kg	1	3/18/2019 6:51:58 PM	SLS5844
Ethylbenzene	ND	0.033		mg/Kg	1	3/18/2019 6:51:58 PM	SLS5844
Xylenes, Total	ND	0.066		mg/Kg	1	3/18/2019 6:51:58 PM	SLS5844
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/18/2019 6:51:58 PM	SLS5844
Surr: Toluene-d8	96.9	70-130		%Rec	1	3/18/2019 6:51:58 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH01 @ 6'
Project: Trunk L Delineation
Collection Date: 3/14/2019 1:20:00 PM
Lab ID: 1903784-009
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	200	60		mg/Kg	20	3/18/2019 8:02:49 PM	43728
EPA METHOD 8015D MOD: GASOLINE 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 ORGANICS						Analyst: **lrm**	
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 SHORT 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

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: BH01 @ 20'
Project: Trunk L Delineation
Collection Date: 3/14/2019 2:40:00 PM
Lab ID: 1903784-010
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	160	60		mg/Kg	20	3/18/2019 8:15:14 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	1100	19		mg/Kg	5	3/18/2019 7:49:12 PM	G58448
Surr: BFB	103	70-130		%Rec	5	3/18/2019 7:49:12 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	130	9.7		mg/Kg	1	3/19/2019 11:13:33 AM	43721
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2019 11:13:33 AM	43721
Surr: DNOP	97.6	70-130		%Rec	1	3/19/2019 11:13:33 AM	43721
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.096		mg/Kg	5	3/18/2019 7:49:12 PM	SLS5844
Toluene	13	0.19		mg/Kg	5	3/18/2019 7:49:12 PM	SLS5844
Ethylbenzene	2.2	0.19		mg/Kg	5	3/18/2019 7:49:12 PM	SLS5844
Xylenes, Total	31	0.38		mg/Kg	5	3/18/2019 7:49:12 PM	SLS5844
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	5	3/18/2019 7:49:12 PM	SLS5844
Surr: Toluene-d8	99.2	70-130		%Rec	5	3/18/2019 7:49:12 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L Delineation
Lab ID: 1903784-011
Matrix: MEOH (SOIL)
Client Sample ID: BH06 @ 6'
Collection Date: 3/14/2019 4:00:00 PM
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 8:27:38 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	120	4.7		mg/Kg	1	3/18/2019 8:17:45 PM	G58448
Surr: BFB	99.7	70-130		%Rec	1	3/18/2019 8:17:45 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	3/19/2019 11:37:30 AM	43721
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/19/2019 11:37:30 AM	43721
Surr: DNOP	107	70-130		%Rec	1	3/19/2019 11:37:30 AM	43721
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.023		mg/Kg	1	3/18/2019 8:17:45 PM	SLS5844
Toluene	0.39	0.047		mg/Kg	1	3/18/2019 8:17:45 PM	SLS5844
Ethylbenzene	0.11	0.047		mg/Kg	1	3/18/2019 8:17:45 PM	SLS5844
Xylenes, Total	2.8	0.093		mg/Kg	1	3/18/2019 8:17:45 PM	SLS5844
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	3/18/2019 8:17:45 PM	SLS5844
Surr: Toluene-d8	93.5	70-130		%Rec	1	3/18/2019 8:17:45 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L Delineation
Lab ID: 1903784-012
Matrix: MEOH (SOIL)
Client Sample ID: BH06 @ 14'
Collection Date: 3/14/2019 4:30:00 PM
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 8:40:02 PM	43728
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	3/18/2019 8:46:11 PM	G58448
Surr: BFB	101	70-130		%Rec	1	3/18/2019 8:46:11 PM	G58448
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/19/2019 12:01:30 PM	43721
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/19/2019 12:01:30 PM	43721
Surr: DNOP	98.5	70-130		%Rec	1	3/19/2019 12:01:30 PM	43721
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.016		mg/Kg	1	3/18/2019 8:46:11 PM	SLS5844
Toluene	0.061	0.032		mg/Kg	1	3/18/2019 8:46:11 PM	SLS5844
Ethylbenzene	ND	0.032		mg/Kg	1	3/18/2019 8:46:11 PM	SLS5844
Xylenes, Total	ND	0.064		mg/Kg	1	3/18/2019 8:46:11 PM	SLS5844
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	3/18/2019 8:46:11 PM	SLS5844
Surr: Toluene-d8	92.9	70-130		%Rec	1	3/18/2019 8:46:11 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903784**

21-Mar-19

Client: Harvest
Project: Trunk L Delineation

Sample ID: **MB-43728**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **43728**	RunNo: **58434**
Prep Date: **3/18/2019**	Analysis Date: **3/18/2019**	SeqNo: **1961763** Units: **mg/Kg**

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

Sample ID: **LCS-43728**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **43728**	RunNo: **58434**
Prep Date: **3/18/2019**	Analysis Date: **3/18/2019**	SeqNo: **1961764** Units: **mg/Kg**

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903784**

21-Mar-19

Client: Harvest
Project: Trunk L Delineation

Sample ID: **LCS-43721**	SampType: **LCS**			TestCode: **EPA Method 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	0	107	63.9	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 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903784**

21-Mar-19

Client: Harvest
Project: Trunk L Delineation

Sample ID: **100ng lcs**	SampType: **LCS**			TestCode: **EPA Method 8260B: Volatiles Short List**					
Client ID: **LCSS**	Batch ID: **SLS58448**			RunNo: **58448**					
Prep Date:	Analysis Date: **3/18/2019**			SeqNo: **1961815**		Units: **mg/Kg**			
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			

Sample ID: **rb**	SampType: **MBLK**			TestCode: **EPA Method 8260B: Volatiles Short List**					
Client ID: **PBS**	Batch ID: **SLS58448**			RunNo: **58448**					
Prep Date:	Analysis Date: **3/18/2019**			SeqNo: **1961816**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 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.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903784**

21-Mar-19

Client: Harvest
Project: Trunk L Delineation

Sample ID: **1903784-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**							
Client ID: **BH02 @ 0.5'**	Batch ID: **G58448**	RunNo: **58448**							
Prep Date:	Analysis Date: **3/19/2019**	SeqNo: **1961600**	Units: **mg/Kg**						
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: **1903784-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D Mod: Gasoline Range**							
Client ID: **BH02 @ 0.5'**	Batch ID: **G58448**	RunNo: **58448**							
Prep Date:	Analysis Date: **3/19/2019**	SeqNo: **1961601**	Units: **mg/Kg**						
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 lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **G58448**	RunNo: **58448**							
Prep Date:	Analysis Date: **3/18/2019**	SeqNo: **1961613**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.6	70	130			
Surr: BFB	510		500.0		101	70	130			

Sample ID: **rb**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**							
Client ID: **PBS**	Batch ID: **G58448**	RunNo: **58448**							
Prep Date:	Analysis Date: **3/18/2019**	SeqNo: **1961614**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	510		500.0		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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 LABORATORY

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

Sample Log-In Check List

Client Name: **Harvest** Work Order Number: **1903784** RcptNo: 1

Received By: **Erin Melendrez** **3/16/2019 10:50:00 AM**

Completed By: **Erin Melendrez** **3/16/2019 12:29:15 PM**

Reviewed By: ET 3/16/19

LB: _____

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			

Chain-of-Custody Record

Client: Harvest Midstream

Mailing Address: 1775 Arroyo Drive

Phone #: 505-632-4415

email or Fax#: khong@harvest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☒ EDD (Type) PDF

Turn-Around Time: Next Day 3/19

☐ Standard ☒ Rush 2 day

Project Name: Trunk L Delineation

Project #: 093i9022

Project Manager: Kijun Hong

Sampler: Eric Carroll / Mary Mujica

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 3.3°c

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1903784	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/13/19	11:30	Soil	SS BH02 @ 0.5'	1 4oz	cool	-001	X	X					X			
	1200		BH02 @ 15'			-002	X	X					X			
	1300		BH03 @ 0.5'			-003	X	X					X			
	1350		BH03 @ 15'			-004	X	X					X			
	1120		BH04 @ 4'			-005	X	X					X			
	1140		BH04 @ 15'			-006	X	X					X			
	1330		BH05 @ 6'			-007	X	X					X			
	1400		BH05 @ 15'			-008	X	X					X			
3/14/19	1320		BH01 @ 6'			-009	X	X					X			
	1440		BH01 @ 20'			-010	X	X					X			
	1000		BH06 @ 6'			-011	X	X					X			
	1630		BH06 @ 14'			-012	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/15/19	9:00	Mary Mujica			3/15/19	0900
3/15/19	1515		Christa Walker		3/15/19	1555
3/15/19	1811	Christa Walker		Courier	3/16/19	1050

Remarks: Please cc: bherb@ltenv.com ecarroll@ltenv.com

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

Analytical Report
Lab Order **1904418**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904418-001 **Matrix:** SOIL

Client Sample ID: BH-7 @ 8-10'
Collection Date: 3/26/2019 1:40:00 PM
Received Date: 4/6/2019 10:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	120	60		mg/Kg	20	4/11/2019 1:28:01 PM	44293
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	1000	23	H	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Surr: BFB	104	70-130	H	%Rec	5	4/12/2019 9:28:12 AM	44226
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	310	10		mg/Kg	1	4/11/2019 10:45:43 AM	44222
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/11/2019 10:45:43 AM	44222
Surr: DNOP	110	70-130		%Rec	1	4/11/2019 10:45:43 AM	44222
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.12	H	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Toluene	4.3	0.23	H	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Ethylbenzene	1.5	0.23	H	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Xylenes, Total	25	0.46	H	mg/Kg	5	4/12/2019 9:28:12 AM	44226
Surr: 1,2-Dichloroethane-d4	87.2	70-130	H	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr: 4-Bromofluorobenzene	98.7	70-130	H	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr: Dibromofluoromethane	118	70-130	H	%Rec	5	4/12/2019 9:28:12 AM	44226
Surr: Toluene-d8	96.7	70-130	H	%Rec	5	4/12/2019 9:28:12 AM	44226

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

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

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 Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1903D34-001 **Matrix:** SOIL

Client Sample ID: BH07 @ 40'
Collection Date: 3/27/2019 11:30:00 AM
Received Date: 3/28/2019 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 RANGE ORGANICS						Analyst: **lrm**	
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 SHORT 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

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903D34**

29-Mar-19

Client: Harvest
Project: Trunk L

Sample ID: **MB-43933**	SampType: **mblk**	TestCode: **EPA 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: **lcs**	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
Chloride	14	1.5	15.00	0	95.4	90	110			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903D34**

29-Mar-19

Client: Harvest
Project: Trunk L

Sample ID: **LCS-43929** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **43929** RunNo: **58701**
Prep Date: **3/28/2019** Analysis Date: **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** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **43929** RunNo: **58701**
Prep Date: **3/28/2019** Analysis Date: **3/28/2019** SeqNo: **1971594** 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	9.3		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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903D34**

29-Mar-19

Client: Harvest

Project: Trunk L

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1903D34**

29-Mar-19

Client: Harvest
Project: Trunk L

Sample ID: **lcs-43853**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**						
Client ID: **LCSS**	Batch ID: **43853**			RunNo: **58659**						
Prep Date: **3/25/2019**	Analysis Date: **3/27/2019**			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			

Sample ID: **mb-43853**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**						
Client ID: **PBS**	Batch ID: **43853**			RunNo: **58659**						
Prep Date: **3/25/2019**	Analysis Date: **3/27/2019**			SeqNo: **1970938**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	540		500.0		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
ND	Not Detected at the Reporting Limit
RL	Reporting Detection Limit
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H	Holding times for preparation or analysis exceeded
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Harvest | Work Order Number: 1903D34 | RcptNo: 1

Received By: Anne Thorne 3/28/2019 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 3/28/2019 7:43:17 AM Anne Thorne

Reviewed By: JO 3/28/19

Labeled by: AT 03/28/19

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Chain-of-Custody Record

Client: Harvest Four Corners

Kijun Hong

Mailing Address:

Phone #: 970-385-1096

email or Fax#: khong@harvest.com

QA/QC Package:

☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☑ EDD (Type) PDF

Turn-Around Time: Same Day

☐ Standard ☒ Rush 3/28/2019

Project Name: Trunk L

Project #:

Project Manager: Kijun Hong - Harvest

Brooke Herb - LTE

Sampler: Eric Carroll

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 1.0

HEAL No. 1903D34

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, ~~F, Br, NO3, NO2, PO4, SO4~~	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/27/19	1130	Soil	BH07 @ 40'	~~Mason~~ 1 4oz	cool	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time	Remarks:
3/27/19	1410				3/27/19	1410	
3/27/19	1812				03/28/19	0700	

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

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 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 Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904474-001
Matrix: MEOH (SOIL)
Client Sample ID: BH-8@30-32'
Collection Date: 4/8/2019 11:00:00 AM
Received Date: 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						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

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904474-002
Matrix: MEOH (SOIL)
Client Sample ID: BH-8@40-42'
Collection Date: 4/8/2019 11:30:00 AM
Received Date: 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 12:10:12 PM	44224
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/10/2019 4:04:33 PM	44222
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/10/2019 4:04:33 PM	44222
Surr: DNOP	123	70-130		%Rec	1	4/10/2019 4:04:33 PM	44222
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	4/9/2019 12:27:59 PM	G59017
Surr: BFB	86.3	73.8-119		%Rec	1	4/9/2019 12:27:59 PM	G59017
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	4/9/2019 12:27:59 PM	B59017
Toluene	ND	0.038		mg/Kg	1	4/9/2019 12:27:59 PM	B59017
Ethylbenzene	ND	0.038		mg/Kg	1	4/9/2019 12:27:59 PM	B59017
Xylenes, Total	ND	0.075		mg/Kg	1	4/9/2019 12:27:59 PM	B59017
Surr: 4-Bromofluorobenzene	86.8	80-120		%Rec	1	4/9/2019 12:27:59 PM	B59017

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

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
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 at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904474-003
Matrix: MEOH (SOIL)
Client Sample ID: BH-9@27-30'
Collection Date: 4/8/2019 2:30:00 PM
Received Date: 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	59		mg/Kg	20	4/9/2019 12:22:36 PM	44224
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
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

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904474-004
Matrix: MEOH (SOIL)
Client Sample ID: BH-9@40-42'
Collection Date: 4/8/2019 2:35:00 PM
Received Date: 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 12:35:01 PM	44224
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
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

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

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
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 at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **MB-44224** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **44224** RunNo: **59030**
Prep Date: **4/9/2019** Analysis Date: **4/9/2019** SeqNo: **1986298** Units: **mg/Kg**

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

Sample ID: **LCS-44224** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **44224** RunNo: **59030**
Prep Date: **4/9/2019** Analysis Date: **4/9/2019** SeqNo: **1986300** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

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
- 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **1904474-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH-8@30-32'** Batch ID: **44222** RunNo: **59043**
Prep Date: **4/9/2019** Analysis Date: **4/11/2019** SeqNo: **1989010** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.7	48.64	0	104	53.5	126			
Surr: DNOP	5.2		4.864		107	70	130			

Sample ID: **1904474-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BH-8@30-32'** Batch ID: **44222** RunNo: **59043**
Prep Date: **4/9/2019** Analysis Date: **4/11/2019** SeqNo: **1989011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	9.7	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** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **44266** RunNo: **59043**
Prep Date: **4/10/2019** Analysis Date: **4/11/2019** SeqNo: **1989013** Units: **%Rec**

Analyte	Result	PQL	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** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **44266** RunNo: **59043**
Prep Date: **4/10/2019** Analysis Date: **4/11/2019** SeqNo: **1989014** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.0	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985583** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.7	73.8	119			

Sample ID: **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985584** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	80.1	123			
Surr: BFB	990		1000		99.3	73.8	119			

Sample ID: **1904474-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH-8@30-32'**	Batch ID: **G59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985586** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.0	19.90	0	103	69.1	142			
Surr: BFB	820		796.2		103	73.8	119			

Sample ID: **1904474-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BH-8@30-32'**	Batch ID: **G59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985587** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.0	19.90	0	100	69.1	142	2.79	20	
Surr: BFB	800		796.2		101	73.8	119	0	0	

Sample ID: **MB-44121**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **44121**	RunNo: **59017**
Prep Date: **4/4/2019**	Analysis Date: **4/9/2019**	SeqNo: **1985591** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.6	73.8	119			

Sample ID: **LCS-44121**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **44121**	RunNo: **59017**
Prep Date: **4/4/2019**	Analysis Date: **4/9/2019**	SeqNo: **1985592** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	73.8	119			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985631** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.6	80	120			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985632** Units: **mg/Kg**

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			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.5	80	120			

Sample ID: **1904474-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH-8@40-42'**	Batch ID: **B59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985636** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.019	0.7513	0.008039	88.8	63.9	127			
Toluene	0.72	0.038	0.7513	0.01976	92.8	69.9	131			
Ethylbenzene	0.69	0.038	0.7513	0	92.4	71	132			
Xylenes, Total	2.1	0.075	2.254	0.02825	93.7	71.8	131			
Surr: 4-Bromofluorobenzene	0.71		0.7513		94.0	80	120			

Sample ID: **1904474-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BH-8@40-42'**	Batch ID: **B59017**	RunNo: **59017**
Prep Date:	Analysis Date: **4/9/2019**	SeqNo: **1985637** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.68	0.019	0.7513	0.008039	88.8	63.9	127	0.0105	20	
Toluene	0.71	0.038	0.7513	0.01976	91.8	69.9	131	0.990	20	
Ethylbenzene	0.69	0.038	0.7513	0	92.5	71	132	0.0439	20	
Xylenes, Total	2.1	0.075	2.254	0.02825	92.8	71.8	131	1.02	20	
Surr: 4-Bromofluorobenzene	0.66		0.7513		88.2	80	120	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904474**

12-Apr-19

Client: Harvest
Project: Trunk L

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**
Client ID: **LCSS**	Batch ID: **44121**	RunNo: **59017**
Prep Date: **4/4/2019**	Analysis Date: **4/9/2019**	SeqNo: **1985641** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		90.9	80	120			

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Harvest** Work Order Number: **1904474** RcptNo: **1**

Received By: **Yazmine Garduno** **4/9/2019 8:10:00 AM** Yazmine Garduno

Completed By: **Yazmine Garduno** **4/9/2019 8:22:39 AM** Yazmine Garduno

Reviewed By: DAD 4/9/19

LB: YG 4/9/19

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: YG 4/9/19

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.4	Good	Yes			

Chain-of-Custody Record

Client: Harvest Four Corners

Kijun Hong

Mailing Address: 1755 Arroyo Dr

Bloomfield, NM 87413

Phone #: 505-632-4475

email or Fax#: KHong@harvestmidstream.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☒ EDD (Type) PDF

Turn-Around Time:

☐ Standard ☒ Rush Next Day

Project Name: Trunk L

Project #:

Project Manager: Brooke Herb

Sampler: Josh Adams

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.4°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1904474	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO3, NO2, PO4, SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
4-8-19	1100	soil	BH-8 @ 30-32'	(1) 4oz	cool	-001	X		X					X								
	1130		BH-8 @ 40-42'			-002	X		X					X								
	1430		BH-9 @ 27-30'			-003	X		X					X								
	1435		BH-9 @ 40-42'			-004	X		X					X								

Date	Time	Relinquished by:	Received by:	Date	Time
4-8-19	1703	Josh Adams	Christ Walt	4/8/19	1707
4/8/19	1819	Christ Walt	Kyle courier	4/9/19	8:10

Remarks:

cc: bherb@ltenv.com
jadams@ltenv.com
ecarroll@ltenv.com

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 11, 2019

Brooke Herb

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

RE: Trunk L

OrderNo.: 1904537

Dear Brooke Herb:

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1904537**
Date Reported: **4/11/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904537-001 **Matrix:** SOIL

Client Sample ID: BH-10 @ 35-37'
Collection Date: 4/9/2019 10:30:00 AM
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 RANGE						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	GS5903(
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
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 SHORT 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

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904537-002 **Matrix:** SOIL

Client Sample ID: BH-10 @ 40-42'
Collection Date: 4/9/2019 10:35:00 AM
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 11:07:19 AM	44254
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	210	38		mg/Kg	10	4/10/2019 2:37:55 PM	GS5903(
Surr: BFB	102	70-130		%Rec	10	4/10/2019 2:37:55 PM	GS5903(
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	32	9.7		mg/Kg	1	4/10/2019 4:11:20 PM	44249
Motor Oil 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 METHOD 8260B: VOLATILES SHORT 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
Ethylbenzene	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: 1,2-Dichloroethane-d4	87.7	70-130		%Rec	10	4/10/2019 2:37:55 PM	R59036
Surr: 4-Bromofluorobenzene	99.2	70-130		%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: Toluene-d8	96.6	70-130		%Rec	10	4/10/2019 2:37:55 PM	R59036

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

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904537-003 **Matrix:** SOIL

Client Sample ID: BH-11 @ 30-32'
Collection Date: 4/9/2019 1:40:00 PM
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 11:19:44 AM	44254
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/10/2019 3:06:24 PM	GS59036
Surr: BFB	104	70-130		%Rec	1	4/10/2019 3:06:24 PM	GS59036
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
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

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

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
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 at testcode

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Trunk L
Lab ID: 1904537-004 **Matrix:** SOIL

Client Sample ID: BH-11 @ 40-42'
Collection Date: 4/9/2019 1:45:00 PM
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 11:32:08 AM	44254
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	4/10/2019 3:34:53 PM	GS5903(
Surr: BFB	106	70-130		%Rec	1	4/10/2019 3:34:53 PM	GS5903(
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
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: VOLATILES 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

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

Qualifiers:

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
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 at testcode

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904537**

11-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **MB-44254**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **44254**	RunNo: **59038**
Prep Date: **4/10/2019**	Analysis Date: **4/10/2019**	SeqNo: **1988133** Units: **mg/Kg**

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

Sample ID: **LCS-44254**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **44254**	RunNo: **59038**
Prep Date: **4/10/2019**	Analysis Date: **4/10/2019**	SeqNo: **1988134** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Qualifiers:

- 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904537**

11-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **LCS-44249**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **LCSS**	Batch ID: **44249**			RunNo: **59045**						
Prep Date: **4/10/2019**	Analysis Date: **4/10/2019**			SeqNo: **1987412**		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**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**						
Client ID: **PBS**	Batch ID: **44249**			RunNo: **59045**						
Prep Date: **4/10/2019**	Analysis Date: **4/10/2019**			SeqNo: **1987413**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		106	70	130			

Qualifiers:

- 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904537**

11-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **R59036** RunNo: **59036**
Prep Date: Analysis Date: **4/10/2019** SeqNo: **1987135** Units: **mg/Kg**

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** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **R59036** RunNo: **59036**
Prep Date: Analysis Date: **4/10/2019** SeqNo: **1987137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 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** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BH-10 @ 35-37'** Batch ID: **R59036** RunNo: **59036**
Prep Date: Analysis Date: **4/10/2019** SeqNo: **1988420** Units: **mg/Kg**

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			
Ethylbenzene	0.87	0.044	0.8787	0	99.5	70	130			
Xylenes, Total	2.8	0.088	2.636	0.1253	99.6	70	130			
Surr: 1,2-Dichloroethane-d4	0.38		0.4394		86.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.4394		102	70	130			
Surr: Dibromofluoromethane	0.40		0.4394		91.2	70	130			
Surr: Toluene-d8	0.42		0.4394		94.5	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904537**

11-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **1904537-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BH-10 @ 35-37'** Batch ID: **R59036** RunNo: **59036**
Prep Date: Analysis 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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904537**

11-Apr-19

Client: Harvest
Project: Trunk L

Sample ID: **2.5ug gro lcs**	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 Range**						
Client ID: **PBS**	Batch ID: **GS59036**			RunNo: **59036**						
Prep Date:	Analysis Date: **4/10/2019**			SeqNo: **1987143**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	520		500.0		104	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Harvest | Work Order Number: 1904537 | RcptNo: 1

Received By: Anne Thorne 4/10/2019 8:10:00 AM

Completed By: Anne Thorne 4/10/2019 8:16:10 AM

Reviewed By: YG 4/10/19

Labeled by: AT 04/10/19

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted) 04/10/19

Adjusted? AT

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			
2	1.0	Good	Yes			
3	1.0	Good	Yes			

Chain-of-Custody Record

Client: Harvest Four Corners

Mailing Address: 1755 Arroyo Dr
Bloomfield, NM 87413

Phone #:

email or Fax#: khong@harvestmidstream.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☒ EDD (Type) PDF

Turn-Around Time:
☐ Standard ☒ Rush same day

Project Name:
Trunk L

Project #:

Project Manager:
Brooke Herb

Sampler: Josh Adams

On Ice: ☒ Yes ☐ No

# of Coolers: 3

Cooler Temp (including CF): 1.5°C ea 1.0, 1.0, 1.0

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 1904537	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl, F, Br, NO3, NO2, PO4, SO4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
4-9-19	1030	Soil	BH-10 @ 35-37'	(1) 4oz meatkot	cool	001	X	X					X			
	1035		BH-10 @ 40-42'			002	X	X					X			
	1340		BH-11 @ 30-32'			003	X	X					X			
↓	1345	↓	BH-11 @ 40-42'	↓	↓	004	X	X					X			

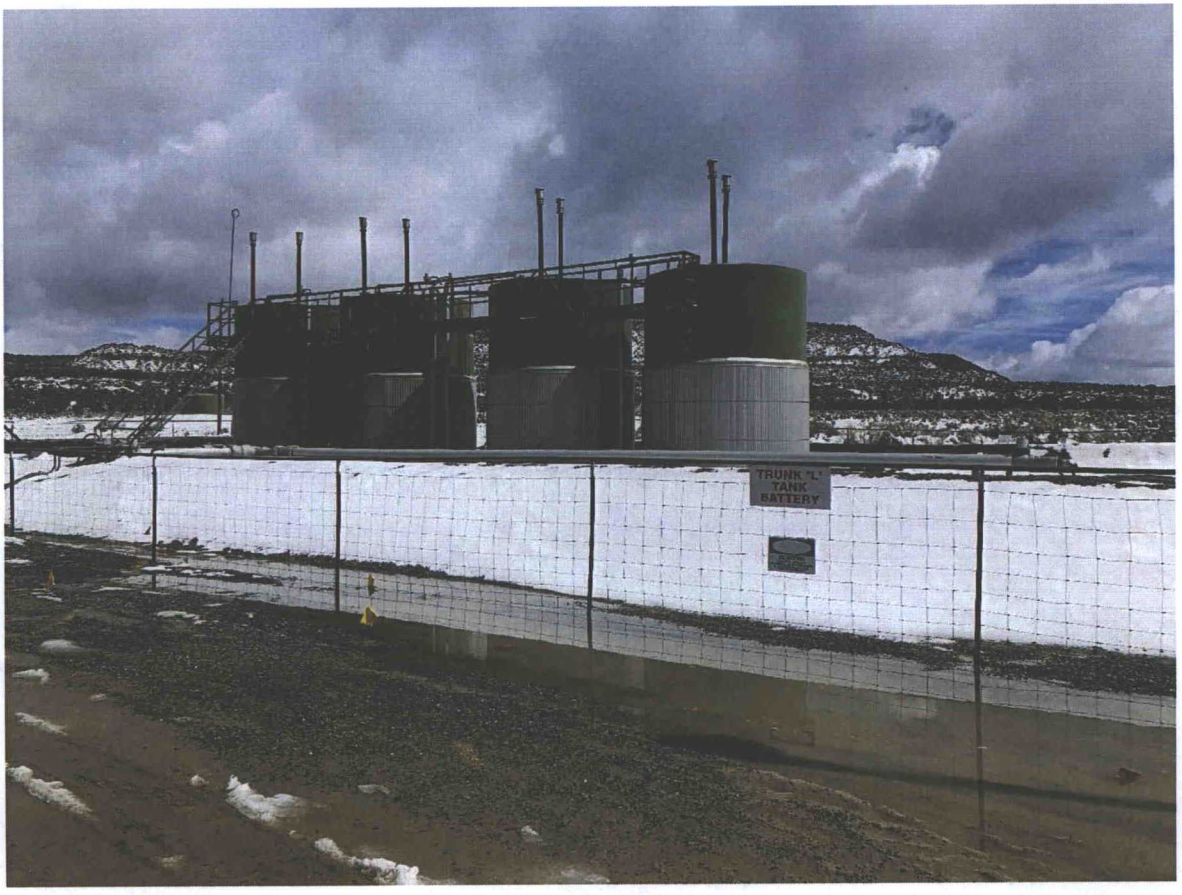
Date	Time	Relinquished by:	Received by:	Via:	Date Time
4-9-19	1505				4/9/19 1505
4/9/19	1840				04/10/19 0810

Remarks: cc: bherb@henv.com
jadams@henv.com
ccarroll@henv.com

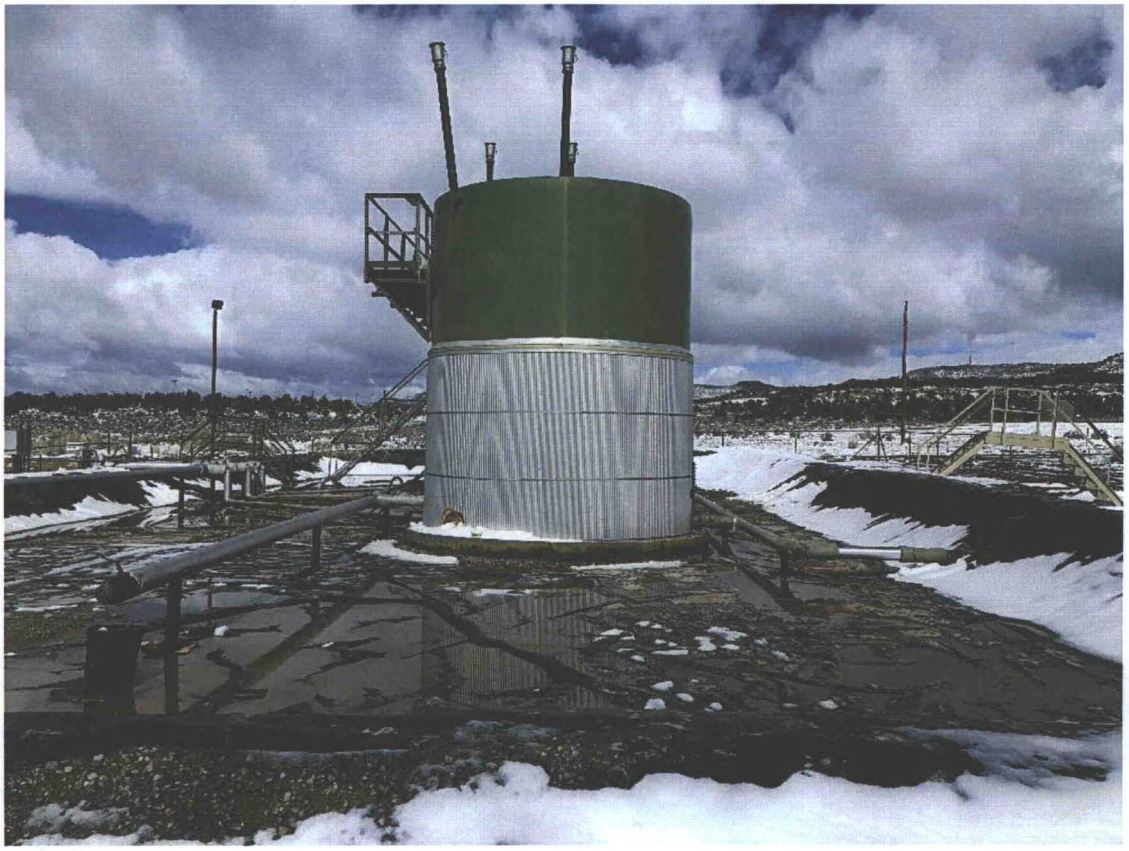
HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

ATTACHMENT 4: PHOTOGRAPHIC LOG



Project: 090319022	Trunk L Tank Battery – View looking east at tank battery	LTE Advancing Opportunity
March 13, 2019	Photographic Log	



Project: 090319022	Trunk L Tank Battery – View looking northeast at tanks inside lined berm	LTE Advancing Opportunity
March 13, 2019	Photographic Log	

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	NCS1903148079
District RP	1014
Facility ID	
Application ID	

NMOCD
JUN 14 2019
DISTRICT III

Release Notification

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)*	NCS1903148079
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.484991 Longitude -107.311031
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral H-20	Site Type Pipeline
Date Release Discovered 1/30/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
K	13	26N	5W	Rio Arriba

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (*Name:* _____)

DENIED
*See Email
BY: Cory Smith
DATE: 6/24/19 (505) 334-6178 Ext. 115

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 30	Volume Recovered (bbls) 30
☒ Produced Water	Volume Released (bbls) 30	Volume Recovered (bbls) 30
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 100	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
A line leak was discovered on the Lateral H-20 pipeline.

Upon discovery, the release was immediately stopped.

Jicarilla tribe has been notified on the release.

30

Smith, Cory, EMNRD

From: Smith, Cory, EMNRD
Sent: Monday, June 24, 2019 1:26 PM
To: 'Kijun Hong'
Subject: Lateral H-20 incident# nCS1903148079

Kijun,

OCD has reviewed the Closure Report for the release at the Lateral H-20 that occurred on 1/30/19 incident# nCS1903148079 and has denied it for the following reasons

- Closure report does not meet all the requirements of 19.15.12.E
  - Siting criteria and all attachments to support (Ie Topo maps, iwaters/cathodic wells etc.) Report indicated a wash and elevation but did not provide topo maps, was there any shallow water bearing vegetation around the release area (Cotton woods, salt cedars etc ?)
  - Scaled Site map, (that has equipment, roads, impacted area, sample points all identified.)
  - JEPO approval for alternative sampling size and methods. (Report indicates there was an approval given please include the correspondence.)

If you have additional questions please give me a call.

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

State of New Mexico
Oil Conservation Division

Incident ID	NCS1903148079
District RP	
Facility ID	
Application ID	

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

Initial Response

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

☒ The source of the release has been stopped.

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

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

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

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

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

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 2/14/2019

email: khong@harvestmidstream.com Telephone: 505-436-8457

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NCS1903148079
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NCS1903148079
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 6/6/2019

email: khong@harvestmidstream.com Telephone: 505-436-8457

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NCS1903148079
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NCS1903148079
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: [signature] Date: 6/6/2019

email: khong@harvestmidstream.com Telephone: 505-436-8457

OCD Only

Received by: 6/14/19 OCD Date:

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

Closure Approved by: Date:

Printed Name: Title:

June 6, 2019

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

RE: Closure Request
Lateral H-20 Pipeline Release
Incident Number NCS1903148079
Rio Arriba County, New Mexico

Dear Mr. Smith:

Harvest Four Corners, LLC (Harvest) presents the following report summarizing remediation and soil sampling activities at the Lateral H-20 pipeline release (Site) located in Unit K, Section 13, Township 26 North, Range 5 West, in Rio Arriba County, New Mexico. On January 30, 2019, Harvest discovered a release due to corrosion on a 6-inch pipeline. Harvest estimated 100 thousand cubic feet (MCF) of natural gas, 30 barrels (bbls) of produced water, and 30 bbls of condensate were released. The release occurred on private land within the Jicarilla Apache Reservation. Harvest notified the Jicarilla Apache Environmental Protection Office (EPO) and the New Mexico Oil Conservation Division (NMOCD) within 24 hours via email which included a Release Notification and Corrective Action Form C-141. The NMOCD assigned the release incident number NCS1903148079.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the elevation difference between the Site and floor of Tapicito Creek of approximately 630 feet. There is not a permitted water well within 5 miles of the Site. The closest significant watercourse to the Site is Tapicito Creek located approximately 1-mile south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine or karst geology. Based on these criteria, 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 total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride.

Harvest repaired the pipeline and excavated approximately 312 yards of impacted soil. The final excavation is an irregular shape as shown in Attachment 1. The approximate final excavation extent is 28 feet for the north and south walls, 35 feet for the west wall, and 60 feet for the east wall with an average depth of 8 feet below ground surface. All impacted soil was properly disposed of at Envirotech Landfarm in San Juan County, New Mexico.

On April 25, 2019, Harvest collected six 5-point composite soil samples from the sidewalls of the excavation. A map of the sample locations is included as Attachment 1.

The soil samples were shipped following chain-of-custody procedures to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH- motor oil range organics (MRO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria in all soil samples collected. A table with laboratory analytical data is included as Attachment 2 and copies of the laboratory analytical results are included as Attachment 3. A photographic log is included as Attachment 4.

Upon receiving the laboratory analytical results, Harvest submitted them to Mr. Hopson Sandoval with the EPO. Mr. Sandoval approved closure of the release and authorized Harvest to backfill the excavation. The EPO approved closure of the site because all soil samples collected from the sidewalls of the excavation were compliant with the NMOCD Table 1 closure criteria. Harvest requests no further action from the NMOCD for incident number NCS1903148079. An updated NMOCD Form C-141 is included as a cover to this report.

If you have any questions or comments, please do not hesitate to contact Kijun Hong at 505-632-4475 or khong@harvestmidstream.com.

Sincerely,

HARVEST FOUR CORNERS, LLC

Kijun Hong
Environmental Specialist

Cc: Hopson Sandoval

Attachments:

Attachment 1	Field Map
Attachment 2	Soil Analytical Results
Attachment 3	Laboratory Analytical Reports
Attachment 4	Photographic Log

ATTACHMENT 1

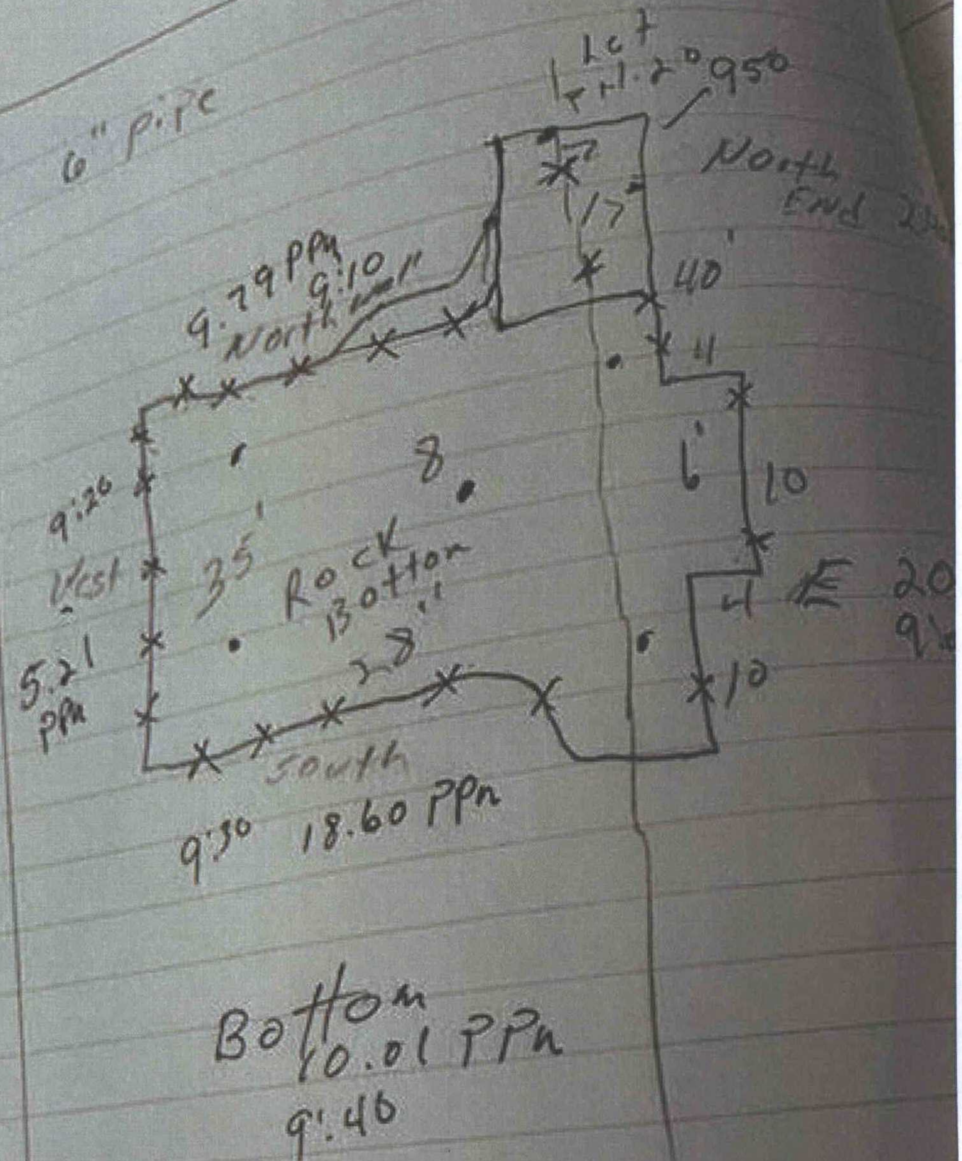
FIELD MAP

4/25-19

Lat H20

80

6" pipe



Lat D-2

We Dug anothe 26 Yard and Re Sam

Lat D-2 Wash-04-02

ATTACHMENT 2

SOIL ANALYTICAL RESULTS

TABLE 1
SOIL ANALYTICAL RESULTS
LATERAL H-20 PIPELINE RELEASE
INCIDENT NUMBER NCS1903148079
RIO ARRIBA COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Gasoline Range Organics (mg/kg)	Diesel Range Organics (mg/kg)	Motor Oil Range Organics (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
North Wall	8	4/25/2016	<0.022	<0.045	<0.045	<0.089	<0.089	<4.5	<9.8	<49	<49	<60
North End	8	4/25/2017	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	42	<49	42	<60
West Wall	8	4/25/2017	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<9.7	<49	<49	<61
South Wall	8	4/25/2018	<0.018	<0.036	<0.036	<0.072	<0.072	<3.6	10	<49	10	<60
East Wall	8	4/25/2019	<0.026	<0.053	<0.053	<0.11	<0.11	<5.3	<10	<50	<50	<60
Bottom	8	4/25/2019	<0.021	<0.042	<0.042	0.085	<0.085	<4.2	<9.6	<48	<48	<60
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	2,500	20,000

Notes:

bgs - below ground surface
BTEX - benzene, toluene, ethylbenzene, and total xylenes
mg/kg - milligrams per kilogram
NE - Not established
NMOCD - New Mexico Oil Conservation Division
TPH - total petroleum hydrocarbons
< - indicates result is below the laboratory reporting limit

ATTACHMENT 3

LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 29, 2019

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

RE: Lat H 20 OrderNo.: 1904C86

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/26/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-001 **Matrix:** SOIL

Client Sample ID: East Wall
Collection Date: 4/25/2019 9:00:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	4/26/2019 11:25:29 AM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/26/2019 10:17:17 AM	44559
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/26/2019 10:17:17 AM	44559
Surr: DNOP	95.7	70-130		%Rec	1	4/26/2019 10:17:17 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	4/26/2019 8:54:14 AM	G59464
Surr: BFB	91.2	73.8-119		%Rec	1	4/26/2019 8:54:14 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.026		mg/Kg	1	4/26/2019 8:54:14 AM	B59464
Toluene	ND	0.053		mg/Kg	1	4/26/2019 8:54:14 AM	B59464
Ethylbenzene	ND	0.053		mg/Kg	1	4/26/2019 8:54:14 AM	B59464
Xylenes, Total	ND	0.11		mg/Kg	1	4/26/2019 8:54:14 AM	B59464
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	4/26/2019 8:54:14 AM	B59464

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-002 **Matrix:** SOIL

Client Sample ID: North Wall
Collection Date: 4/25/2019 9:10:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	4/26/2019 11:37:54 AM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/26/2019 10:39:18 AM	44559
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/26/2019 10:39:18 AM	44559
Surr: DNOP	96.7	70-130		%Rec	1	4/26/2019 10:39:18 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	4/26/2019 9:17:36 AM	G59464
Surr: BFB	88.4	73.8-119		%Rec	1	4/26/2019 9:17:36 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	4/26/2019 9:17:36 AM	B59464
Toluene	ND	0.045		mg/Kg	1	4/26/2019 9:17:36 AM	B59464
Ethylbenzene	ND	0.045		mg/Kg	1	4/26/2019 9:17:36 AM	B59464
Xylenes, Total	ND	0.089		mg/Kg	1	4/26/2019 9:17:36 AM	B59464
Surr: 4-Bromofluorobenzene	87.7	80-120		%Rec	1	4/26/2019 9:17:36 AM	B59464

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-003 **Matrix:** SOIL

Client Sample ID: West Wall
Collection Date: 4/25/2019 9:20:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	61		mg/Kg	20	4/26/2019 11:50:18 AM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/26/2019 11:01:25 AM	44559
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/26/2019 11:01:25 AM	44559
Surr: DNOP	98.4	70-130		%Rec	1	4/26/2019 11:01:25 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/26/2019 9:41:09 AM	G59464
Surr: BFB	90.8	73.8-119		%Rec	1	4/26/2019 9:41:09 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	4/26/2019 9:41:09 AM	B59464
Toluene	ND	0.046		mg/Kg	1	4/26/2019 9:41:09 AM	B59464
Ethylbenzene	ND	0.046		mg/Kg	1	4/26/2019 9:41:09 AM	B59464
Xylenes, Total	ND	0.092		mg/Kg	1	4/26/2019 9:41:09 AM	B59464
Surr: 4-Bromofluorobenzene	89.8	80-120		%Rec	1	4/26/2019 9:41:09 AM	B59464

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-004 **Matrix:** SOIL

Client Sample ID: South Wall
Collection Date: 4/25/2019 9:30:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	4/26/2019 12:02:43 PM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	10	9.8		mg/Kg	1	4/26/2019 11:23:23 AM	44559
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/26/2019 11:23:23 AM	44559
Surr: DNOP	99.5	70-130		%Rec	1	4/26/2019 11:23:23 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	4/26/2019 10:04:44 AM	G59464
Surr: BFB	121	73.8-119	S	%Rec	1	4/26/2019 10:04:44 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	4/26/2019 10:04:44 AM	B59464
Toluene	ND	0.036		mg/Kg	1	4/26/2019 10:04:44 AM	B59464
Ethylbenzene	ND	0.036		mg/Kg	1	4/26/2019 10:04:44 AM	B59464
Xylenes, Total	0.073	0.072		mg/Kg	1	4/26/2019 10:04:44 AM	B59464
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	4/26/2019 10:04:44 AM	B59464

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-005 **Matrix:** SOIL

Client Sample ID: Bottom
Collection Date: 4/25/2019 9:40:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	4/26/2019 12:15:08 PM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/26/2019 11:24:38 AM	44559
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/26/2019 11:24:38 AM	44559
Surr: DNOP	90.2	70-130		%Rec	1	4/26/2019 11:24:38 AM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	4/26/2019 10:52:04 AM	G59464
Surr: BFB	95.6	73.8-119		%Rec	1	4/26/2019 10:52:04 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	4/26/2019 10:52:04 AM	B59464
Toluene	ND	0.042		mg/Kg	1	4/26/2019 10:52:04 AM	B59464
Ethylbenzene	ND	0.042		mg/Kg	1	4/26/2019 10:52:04 AM	B59464
Xylenes, Total	ND	0.085		mg/Kg	1	4/26/2019 10:52:04 AM	B59464
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	4/26/2019 10:52:04 AM	B59464

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

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lat H 20
Lab ID: 1904C86-006 **Matrix:** SOIL

Client Sample ID: North End
Collection Date: 4/25/2019 9:50:00 AM
Received Date: 4/26/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	4/26/2019 12:27:33 PM	44561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**	
Diesel Range Organics (DRO)	42	9.7		mg/Kg	1	4/26/2019 1:04:42 PM	44559
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/26/2019 1:04:42 PM	44559
Surr: DNOP	87.0	70-130		%Rec	1	4/26/2019 1:04:42 PM	44559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/26/2019 11:15:41 AM	G59464
Surr: BFB	113	73.8-119		%Rec	1	4/26/2019 11:15:41 AM	G59464
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	4/26/2019 11:15:41 AM	B59464
Toluene	ND	0.049		mg/Kg	1	4/26/2019 11:15:41 AM	B59464
Ethylbenzene	ND	0.049		mg/Kg	1	4/26/2019 11:15:41 AM	B59464
Xylenes, Total	ND	0.098		mg/Kg	1	4/26/2019 11:15:41 AM	B59464
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	4/26/2019 11:15:41 AM	B59464

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C86**

29-Apr-19

Client: Harvest
Project: Lat H 20

Sample ID: **MB-44561**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **44561**	RunNo: **59463**
Prep Date: **4/26/2019**	Analysis Date: **4/26/2019**	SeqNo: **2003513** Units: **mg/Kg**

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

Sample ID: **LCS-44561**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **44561**	RunNo: **59463**
Prep Date: **4/26/2019**	Analysis Date: **4/26/2019**	SeqNo: **2003514** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.2	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C86**

29-Apr-19

Client: Harvest
Project: Lat H 20

Sample ID: **MB-44559**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **44559**	RunNo: **59439**
Prep Date: **4/26/2019**	Analysis Date: **4/26/2019**	SeqNo: **2002693** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.7	70	130			

Sample ID: **LCS-44559**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **44559**	RunNo: **59439**
Prep Date: **4/26/2019**	Analysis Date: **4/26/2019**	SeqNo: **2002694** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.7	63.9	124			
Surr: DNOP	3.9		5.000		77.8	70	130			

Sample ID: **LCS-44544**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **44544**	RunNo: **59449**
Prep Date: **4/25/2019**	Analysis Date: **4/26/2019**	SeqNo: **2002781** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.9	70	130			

Sample ID: **MB-44544**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **44544**	RunNo: **59449**
Prep Date: **4/25/2019**	Analysis Date: **4/26/2019**	SeqNo: **2002782** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	14		10.00		144	70	130			S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C86**

29-Apr-19

Client: Harvest
Project: Lat H 20

Sample ID: **RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **G59464** RunNo: **59464**
Prep Date: Analysis Date: **4/26/2019** SeqNo: **2003349** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.6	73.8	119			

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **G59464** RunNo: **59464**
Prep Date: Analysis Date: **4/26/2019** SeqNo: **2003350** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	80.1	123			
Surr: BFB	1000		1000		104	73.8	119			

Sample ID: **1904C86-001AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **East Wall** Batch ID: **G59464** RunNo: **59464**
Prep Date: Analysis Date: **4/26/2019** SeqNo: **2003351** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.3	26.26	0	101	69.1	142			
Surr: BFB	1100		1050		109	73.8	119			

Sample ID: **1904C86-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **East Wall** Batch ID: **G59464** RunNo: **59464**
Prep Date: Analysis Date: **4/26/2019** SeqNo: **2003352** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.3	26.26	0	100	69.1	142	0.358	20	
Surr: BFB	1100		1050		104	73.8	119	0	0	

Sample ID: **MB-44536** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **44536** RunNo: **59464**
Prep Date: **4/25/2019** Analysis Date: **4/26/2019** SeqNo: **2003356** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	870		1000		86.9	73.8	119			

Sample ID: **LCS-44536** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **44536** RunNo: **59464**
Prep Date: **4/25/2019** Analysis Date: **4/26/2019** SeqNo: **2003357** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	73.8	119			

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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C86**

29-Apr-19

Client: Harvest
Project: Lat H 20

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B59464**	RunNo: **59464**
Prep Date:	Analysis Date: **4/26/2019**	SeqNo: **2003385** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.7	80	120			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B59464**	RunNo: **59464**
Prep Date:	Analysis Date: **4/26/2019**	SeqNo: **2003386** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.8	80	120			
Toluene	0.98	0.050	1.000	0	98.4	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.3	80	120			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	80	120			

Sample ID: **1904C86-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **North Wall**	Batch ID: **B59464**	RunNo: **59464**
Prep Date:	Analysis Date: **4/26/2019**	SeqNo: **2003387** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.022	0.8913	0	91.2	63.9	127			
Toluene	0.83	0.045	0.8913	0.01034	92.2	69.9	131			
Ethylbenzene	0.83	0.045	0.8913	0	93.5	71	132			
Xylenes, Total	2.5	0.089	2.674	0.01462	92.9	71.8	131			
Surr: 4-Bromofluorobenzene	0.80		0.8913		89.3	80	120			

Sample ID: **1904C86-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **North Wall**	Batch ID: **B59464**	RunNo: **59464**
Prep Date:	Analysis Date: **4/26/2019**	SeqNo: **2003388** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.022	0.8913	0	89.9	63.9	127	1.49	20	
Toluene	0.82	0.045	0.8913	0.01034	90.3	69.9	131	2.06	20	
Ethylbenzene	0.81	0.045	0.8913	0	91.2	71	132	2.49	20	
Xylenes, Total	2.5	0.089	2.674	0.01462	91.6	71.8	131	1.34	20	
Surr: 4-Bromofluorobenzene	0.77		0.8913		86.7	80	120	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1904C86**

29-Apr-19

Client: Harvest
Project: Lat H 20

Sample ID: **MB-44536**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **44536**	RunNo: **59464**
Prep Date: **4/25/2019**	Analysis Date: **4/26/2019**	SeqNo: **2003389** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.86		1.000		86.2	80	120			

Sample ID: **LCS-44536**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **44536**	RunNo: **59464**
Prep Date: **4/25/2019**	Analysis Date: **4/26/2019**	SeqNo: **2003390** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Harvest | Work Order Number: 1904C86 | RcptNo: 1

Received By: Anne Thorne 4/26/2019 8:15:00 AM Anne Thorne

Completed By: Anne Thorne 4/26/2019 8:34:23 AM Anne Thorne

Reviewed By: JO 4/26/19

Labeled by:

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good	Yes			
2	3.9	Good	Yes			

Chain-of-Custody Record

Client: Harvest mid Stream

Mailing Address: 1755 ARROYO DR
BloomField NM 87413

Phone #: 505-632-4475

email or Fax#: KHong@Harvestmidstream.com

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 4-26-19
☐ Standard ☑ Rush Same day

Project Name: Lat H-20

Project #:

Project Manager: Kujun Hong

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): 1.9, 3.9°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and # (Mead Kit)	Preservative Type	HEAL No. 1904C86	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides					
4/25/19	9:00	Soil	East wall	1-4oz	Cool	-001	X	X									X					
4/25/19	9:10	Soil	North wall	1-4oz	↓	-002	X	X									X					
4/25/19	9:20	Soil	west wall	1 4oz	↓	-003	X	X									X					
4/25/19	9:30	Soil	South wall	1 4oz	↓	-004	X	X									X					
4/25/19	9:40	Soil	Bottom	1-4oz	↓	-005	X	X									X					
4/25/19	9:50	Soil	North End	1-4o	↓	-006	X	X									X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4/25/19	1714	Morg Killion	Christ Walls		4/25/19	1714
4/25/19	1840	Christ Walts	[signature]		04/26/19	0815

Remarks:

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

ATTACHMENT 4

PHOTOGRAPHIC LOG

Photographic Log

View of excavation during pipeline repair.