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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Incident NVF1903832832

Release Notification

Responsible Party

Responsible Party	Harvest Four Corners, LLC	OGRID	37538
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # *(assigned by OCD)*	
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.97443 Longitude -108.10724
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Culpepper Martin SRC 1B	Site Type Meter Run
Date Release Discovered 1/10/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
E	21	232N	12W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 0.48	Volume Recovered (bbls) 0.48
	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) 105.5	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Check valve on the meter run failed due to freeze.

NMOCD
FEB 07 2019
DISTRICT III

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?
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: 1/28/2019

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

OCD Only

Received by: Vanessa Fields Date: 2/7/2019

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Energy Minerals and Natural Resources

Oil Conservation Division
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Santa Fe, NM 87505

NMOCD
MAY 29 2018
DISTRICT III

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Seymour 8A Well Location**	Facility Type: **Meter House**

Surface Owner: **BLM**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	**14**	**31N**	**9W**					**San Juan**

Latitude 36.89491 **Longitude** -107.74394

NATURE OF RELEASE

Type of Release: **Natural Gas**	Volume of Release: **58.6 MCF Natural Gas (calculated on 5/14/2018)** **No Liquids**	Volume Recovered: **0 MCF Natural Gas**
Source of Release: **Tubing from orifice fitting sheared off.**	Date and Hour of Occurrence: **5/11/2018 @ 2:30 PM**	Date and Hour of Discovery: **5/11/2018 @ 2:30 PM**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **NA**	
By Whom? **NA**	Date and Hour: **NA**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.*
Due to high winds, the meter house at the well location was blown over causing the tubing from the orifice fitting tab to shear of releasing natural gas to the atmosphere. Upon discovery, the line was shut in and put out of service.

Describe Area Affected and Cleanup Action Taken.*
There was no impacted soil associated with this release.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: **Kijun Hong**	
Title: **Environmental Specialist**	Approval Date: 7/31/18 Expiration Date:
E-mail Address: **kijun.hong@williams.com**	Conditions of Approval: — Attached ☐
Date: **5/23/2018** Phone: **(505) 632-4475**	

* Attach Additional Sheets If Necessary

NVF1918641392

NMOCD

APR 16 2018

DISTRICT III

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Energy Minerals and Natural Resources

Oil Conservation Division
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Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Trunk C**	Facility Type: **Pipeline**

Surface Owner: **Private**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	9	31N	13W					San Juan

Latitude 36.91600 Longitude -108.20660

NATURE OF RELEASE

Type of Release: **Natural Gas**	Volume of Release: **0.437.5 MCF Natural Gas Unknown amount of liquids**	Volume Recovered: **0 MCF 18 cubic yards of impacted soil removed**
Source of Release: **Damaged pipeline due to line strike**	Date and Hour of Occurrence: **3/31/2018 @ 6:00 PM**	Date and Hour of Discovery: **3/31/2018 @ 6:00 PM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Vanessa Fields and Cory Smith**	
By Whom? **Kijun Hong**	Date and Hour: **4/2/2015 @ 9:26 AM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.* **A farmer was cleaning out his ditch and replacing his water line when he struck our pipeline with a backhoe. Pipeline was isolated, shut in, and repaired.**

Describe Area Affected and Cleanup Action Taken.*
18 cubic yards of impacted soil was removed during cleanup. Confirmation samples were collected on 4/2/2018.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: **Kijun Hong**	
Title: **Environmental Specialist**	Approval Date: 4/23/18 Expiration Date:
E-mail Address: **kijun.hong@williams.com**	Conditions of Approval: Attached ☐
Date: **4/10/2018** Phone: **(505) 632-4475**	

* Attach Additional Sheets If Necessary

24 hour notification not provided to the OCD.
Sample Area 8015/8021
NVF1810231591

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Fields, Vanessa, EMNRD

From: Hong, Kijun <Kijun.Hong@williams.com>
Sent: Monday, April 2, 2018 9:26 AM
To: Fields, Vanessa, EMNRD; Smith, Cory, EMNRD
Cc: Webre, Matt
Subject: Williams - Trunk C Line Strike

Vanessa and Cory,

On March 31, 2018 at 6pm, there was a line strike to the Williams – Trunk C pipeline by a farmer operating a backhoe.

The line strike occurred at GPS location 36.916, -108.2066. The severity of the release and potential risk to public safety was not relayed to the EHS group due to miscommunication.

We have a crew working on the initial cleanup and should have further information shortly. Please let us know if there is anything else we can provide in the meantime.

Thank You,
Kijun

Kijun Hong | Williams | Environmental Specialist | West – Four Corners Area
Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413

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Energy Minerals and Natural Resources

Oil Conservation Division
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Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Owens 2 Drip**	Facility Type: **Drip Location**

Surface Owner: **BLM**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	**19**	**31N**	**12W**					**San Juan**

Latitude 36.8899 Longitude -108.1386

NATURE OF RELEASE

Type of Release: **Pipeline Liquids**	Volume of Release: **20 yards of impacted soil**	Volume Recovered: **20 yards of impacted soil removed**
Source of Release: **Above ground drip tank that had a leak due to rust.**	Date and Hour of Occurrence: **3/2/2018 @ 10:45 AM** **Impacted dirt hauled on 3/9/2018**	Date and Hour of Discovery: **3/2/2018 @ 10:45 AM**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? **NA**	
By Whom? **NA**	Date and Hour: **NA**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

NMOCD
APR 26 2018
DISTRICT III

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.* **Above ground drip tank that had a leak due to rust. Tank has been replaced.**

Describe Area Affected and Cleanup Action Taken.*
All impacted soil has been removed and back filled with clean dirt. Confirmation samples came back all "non-detect. Please see results attached.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: **Kijun Hong**	
Title: **Environmental Specialist**	Approval Date: 5/31/18 Expiration Date:
E-mail Address: **kijun.hong@williams.com**	Conditions of Approval: Attached ☐
Date: **4/23/2018** Phone: **(505) 632-4475**	

* Attach Additional Sheets If Necessary

NVF1815131868

12

Fields, Vanessa, EMNRD

From: Hong, Kijun <Kijun.Hong@williams.com>
Sent: Monday, April 23, 2018 10:20 AM
To: Fields, Vanessa, EMNRD
Cc: Smith, Cory, EMNRD
Subject: RE: Phone discussion of non-reported release
Attachments: C-141 Owens 2 Drip - INITIAL-FINAL 4-23-18.pdf

Please find attached the Initial-Final C-141 for the release from our Drip tank at the Owens 2 location.

Please let me now if there is anything else we can provide regarding this incident.

Thank You!!
Kijun

From: Hong, Kijun
Sent: Thursday, April 12, 2018 7:08 PM
To: 'Fields, Vanessa, EMNRD' <Vanessa.Fields@state.nm.us>
Cc: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: Phone discussion of non-reported release

Hi Vanessa,
I apologize for the delay. I am still waiting for the Sampling Form we usually get from the COMs group.

Williams had a leak from an above ground tank at our Owens 2 Drip location (36.8899, -108.1386) on 3/2/2018.

20 Yards of impacted soil was removed on 3/9 but never reported to our environmental group. Because of this breakdown in communication, the OCD was not given notification of sampling and a C-141 was not submitted. I have attached the sample results.

We have talked to our maintenance group to make sure yardages are reported and I have gotten with IEI who now sends me daily tickets showing what we have delivered to them.

Other than the C-141, please let us know what we need to do to close out this release.

Thank You,
Kijun

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]
Sent: Thursday, April 12, 2018 8:31 AM
To: Hong, Kijun <Kijun.Hong@williams.com>
Cc: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXTERNAL] Phone discussion of non-reported release

Good morning Kijun,

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, 2018

Lloyd Bell
Williams Field Services
1755 Arroyo Dr.,
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: Owen 20 OrderNo.: 1803594

Dear Lloyd Bell:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/10/2018 for the analyses presented in the following report.

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

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1803594**
Date Reported: **3/21/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Owen 20
Lab ID: 1803594-001 **Matrix:** SOIL

Client Sample ID: Bottom
Collection Date: 3/9/2018 1:30:00 PM
Received Date: 3/10/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/20/2018 9:07:44 PM	37137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/13/2018 9:21:48 PM	36968
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	3/13/2018 9:21:48 PM	36968
Surr: DNOP	94.4	70-130		%Rec	1	3/13/2018 9:21:48 PM	36968
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Surr: BFB	98.9	15-316		%Rec	1	3/13/2018 6:38:46 PM	36964
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Benzene	ND	0.023		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Toluene	ND	0.047		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Xylenes, Total	ND	0.094		mg/Kg	1	3/13/2018 6:38:46 PM	36964
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	3/13/2018 6:38:46 PM	36964

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: Williams Field Services
Project: Owen 20
Lab ID: 1803594-002 **Matrix:** SOIL

Client Sample ID: Wall
Collection Date: 3/9/2018 1:30:00 PM
Received Date: 3/10/2018 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	3/20/2018 9:20:09 PM	37137
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/13/2018 9:43:52 PM	36968
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/13/2018 9:43:52 PM	36968
Surr: DNOP	94.0	70-130		%Rec	1	3/13/2018 9:43:52 PM	36968
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Surr: BFB	95.4	15-316		%Rec	1	3/13/2018 7:02:16 PM	36964
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Benzene	ND	0.024		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Toluene	ND	0.047		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Ethylbenzene	ND	0.047		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Xylenes, Total	ND	0.095		mg/Kg	1	3/13/2018 7:02:16 PM	36964
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	3/13/2018 7:02:16 PM	36964

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#: **1803594**

21-Mar-18

Client: Williams Field Services
Project: Owen 20

Sample ID	**MB-37137**	SampType:	**mblk**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**37137**		RunNo:	**49932**				
Prep Date:	**3/20/2018**	Analysis Date:	**3/20/2018**		SeqNo:	**1617510**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-37137**	SampType:	**lcs**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**37137**		RunNo:	**49932**				
Prep Date:	**3/20/2018**	Analysis Date:	**3/20/2018**		SeqNo:	**1617511**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.5	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#: **1803594**

21-Mar-18

Client: Williams Field Services

Project: Owen 20

Sample ID **LCS-36968**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **36968**	RunNo: **49732**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609428** 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	86.8	70	130			
Surr: DNOP	3.8		5.000		76.0	70	130			

Sample ID **MB-36968**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **36968**	RunNo: **49732**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609429** 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		93.4	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#: **1803594**

21-Mar-18

Client: Williams Field Services

Project: Owen 20

Sample ID **MB-36964**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **36964**	RunNo: **49750**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609795** 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	930		1000		92.8	15	316			

Sample ID **LCS-36964**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **36964**	RunNo: **49750**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609796** 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	105	75.9	131			
Surr: BFB	1000		1000		104	15	316			

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#: **1803594**

21-Mar-18

Client: Williams Field Services

Project: Owen 20

Sample ID **MB-36964**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **36964**	RunNo: **49750**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609836** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.8	80	120			

Sample ID **LCS-36964**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **36964**	RunNo: **49750**
Prep Date: **3/12/2018**	Analysis Date: **3/13/2018**	SeqNo: **1609837** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	103	70.1	121			
Benzene	1.0	0.025	1.000	0	105	77.3	128			
Toluene	1.0	0.050	1.000	0	104	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	103	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	105	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.3	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: WILLIAMS FIELD SERVI Work Order Number: 1803594 RcptNo: 1

Received By: Isaiah Ortiz 3/10/2018 8:00:00 AM IO

Completed By: Isaiah Ortiz 3/12/2018 9:16:45 AM IO

Reviewed By: SRC 03/12/18 labeled by: AG

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? _____
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: WFS	Turn-Around Time: ☑ Standard ☐ Rush
Mailing Address: 1755 ARROYA DR.	Project Name: OWEN-20
Phone #:	Project #:
email or Fax#: LLOYD BELL	Project Manager: LLOYD BELL
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	Sampler: Tuck Wiggins
Accreditation ☐ NELAP ☐ Other	On Ice: ☑ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 0.9

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1803594	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	CHLORIDE				Air Bubbles (Y or N)
3-9-18	1:30pm	soil	BOTTOM	1-402	COOL	-001	X		X									X				
3-9-18	1:30pm	soil	WALL	1-402	COOL	-002	X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
3-9-18	3:30pm	Tuck Wiggins		3/9/18	1530
3/9/18	1804			3/10/18	800

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.

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

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

NMOCD
MAY 29 2018
DISTRICT III

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Florence 44 Pipeline**	Facility Type: **Pipeline**

Surface Owner: **BLM**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
I	**30**	**30N**	**8W**					**San Juan**

Latitude 36.782222 Longitude -107.706389

NATURE OF RELEASE

Type of Release: **Natural Gas and Pipeline Liquids**	Volume of Release: **107.9 MCF Natural Gas determined on 5/10/2018** **70 yards of impacted soil removed on 5/21/2018**	Volume Recovered: **0 MCF Natural Gas** **70 yards of impacted soil removed on 5/21/2018**
Source of Release: **Leak in pipeline**	Date and Hour of Occurrence: **4/20/2018 @ 2:14 PM**	Date and Hour of Discovery: **4/20/2018 @ 2:14 PM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Vanessa Fields**	
By Whom? **Kijun Hong**	Date and Hour: **Immediate notice was given on 5/21/2018 @ 8:39 AM when it was anticipated that more than 50 yards of impacted soil will be removed.**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.*
Release caused by failure of the pipeline due to external corrosion. During the replacement of bad pipe, impacts were encountered.

Describe Area Affected and Cleanup Action Taken.*
All impacted soil has been removed and backfilled with clean dirt. Confirmation samples have been collected and are being analyzed/processed.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: **Kijun Hong**	
Title: **Environmental Specialist**	Approval Date: 5/31/18 Expiration Date:
E-mail Address: **kijun.hong@williams.com**	Conditions of Approval: Attached ☐
Date: **5/23/2018** Phone: **(505) 632-4475**	

* Attach Additional Sheets If Necessary

NVF1815134159

Brandon Powell
Office: (505) 334-6178 ext. 116
"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"

From: Webre, Matt <Matt.Webre@Williams.com>
Sent: Wednesday, May 23, 2018 10:26 AM
To: Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Cc: Hong, Kijun <Kijun.Hong@williams.com>; Perrin, Charlie, EMNRD <charlie.perrin@state.nm.us>
Subject: FW: C-141 Florence 44 - INITIAL 5-23-18

Brandon,

I would appreciate you clarifying the volume triggers below. What Kijun stated below is what I clearly remember you communicating to Williams. Williams has been more than willing to follow OCD guidance on reporting releases based on volumes regardless of the fact that it is not codified in any regulation or guidelines. Vanessa referenced "this was initially discussed in meeting with Williams in March of 2017." The OCD needs to understand that uncodified guidance makes it hard for regulated companies to maintain compliance as different people may have different recollection of conversations, expectations, and/or interpretations.

Additionally, if the new spill rule is passed in its current draft, there is no language regarding reporting releases based on volumes. Would it be your intent to continue requiring notifications for the 12 and 50 cubic yard triggers?

Williams.
Matt Webre, PG | Williams | Supervisor EH&S | West Safety and Environmental
Office: 505-632-4442 | Cell: 505-215-8059 | 1755 Arroyo Drive, Bloomfield, NM 87413
Join Our Talent Network PIPE UP

From: Hong, Kijun
Sent: Wednesday, May 23, 2018 9:23 AM
To: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; l1thomas@blm.gov
Cc: Ruybalid, Tristen <Tristen.Ruybalid@Williams.com>; Webre, Matt <Matt.Webre@Williams.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: C-141 Florence 44 - INITIAL 5-23-18

It was my understanding that 12 yards triggers the 15 day written notification (C-141) and 50 yards triggers immediate verbal notification (phone call).

Are we mistaken in this?

From: Fields, Vanessa, EMNRD [mailto:Vanessa.Fields@state.nm.us]
Sent: Wednesday, May 23, 2018 9:09 AM
To: Hong, Kijun <Kijun.Hong@williams.com>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; l1thomas@blm.gov
Cc: Ruybalid, Tristen <Tristen.Ruybalid@Williams.com>; Webre, Matt <Matt.Webre@Williams.com>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>
Subject: RE: C-141 Florence 44 - INITIAL 5-23-18

Please revise your C-141 before submitting to the agencies as it will be denied. Immediate notification was not made to the OCD. Notification to the OCD and the initial C-141 should have been submitted to the OCD 15 days from the initial release discovery on April 20, 2018. As we have discussed on numerous occasions the release reporting threshold is at 50 MCF and 12 cyds of impacted soil removal. As well, please provide the load tickets of the impacted soil that was disposed of at the landfarm.

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: Hong, Kijun <Kijun.Hong@williams.com>
Sent: Wednesday, May 23, 2018 8:41 AM
To: Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; l1thomas@blm.gov
Cc: Ruybalid, Tristen <Tristen.Ruybalid@Williams.com>
Subject: C-141 Florence 44 - INITIAL 5-23-18

Please find attached the initial C-141 for the release Williams had on our Florence 44 pipeline due to external corrosion.

A hard copy will be sent to your respective offices.

Thank You!
Kijun

Kijun Hong | Williams | Environmental Specialist | West – Four Corners Area
Office: 505-632-4475 | Cell: 505-436-8457 | 1755 Arroyo Dr., Bloomfield, NM 87413

District I
1625 N. French Dr., Hobbs, NM 88240
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Federal F1**	Facility Type: **Pipeline**

Surface Owner: **BLM**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	**16**	**27N**	**10W**					**San Juan**

Latitude 36.57987 Longitude -107.89777

NATURE OF RELEASE

Type of Release: **Pipeline leak**	Volume of Release: **9.6451 MCF Natural Gas** **140 yards of impacted soil removed so far.**	Volume Recovered: **0 MCF Natural Gas** **140 yards of impacted soil removed so far.**
Source of Release: **Failed pipeline**	Date and Hour of Occurrence: **7/24/2018 @ 9:00AM**	Date and Hour of Discovery: **7/24/2018 @ 9:00AM**
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? **Courtesy Notification email sent 7/24/2018**	
By Whom? **NA**	Date and Hour: **NA**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.*
Failure in the pipeline. Upon discovery, the section of pipe was isolated and blown down.

Describe Area Affected and Cleanup Action Taken.*
Remediation currently in progress. 140 yards of impacted soil have been removed so far.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:

Printed Name: **Kijun Hong**

Title: **Environmental Specialist**

E-mail Address: **kijun.hong@williams.com**

Date: **8/14/2018** Phone: **(505) 632-4475**

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 9/4/18 Expiration Date:

Conditions of Approval: Follow 19.15.29 Site Ranking & Depth to water

Attached ☐

* Attach Additional Sheets If Necessary

#NCS1824348377

NMOCD

AUG 17 2018

DISTRICT III

Ranking Score Determination
Site Name: **Federal F1**
Legal Description: **Unit B, Section 16, T27N, R10W**
GPS Coordinates: **36.57987, -107.89777**

Ranking Score based on NMOCD Guidelines for Remediation of Leaks, Spills, and Releases dated August 13, 1993.

Depth to Ground *- The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.*

Notes: **The nearest depth to water data was located 2,125 meters to the northwest with an altitude of 5,982ft and a depth to ground water of 55ft. Given that the release location is at an elevation of 6,086ft, it is assumed that the depth to ground water at the release location is 159ft.**

Depth to Groundwater	<50 feet	50 – 99 feet	>100 feet
Ranking Score (circle one)	20	10	0

Wellhead Protection Area *- The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.*

Notes: **There are no water sources within 1000ft from the release location.**

Wellhead Protection Area	<1000 from a water source; or <200 feet from a private domestic water source	
Ranking Score (circle one)	Yes → 20	No → 0

Distance To Nearest Surface Water Body *- The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.*

Notes: **The nearest surface water body to the release location is an intermittent stream 289.8ft to the northwest.**

Distance to Surface Water Body	<200 horizontal feet	200 – 1,000 horizontal feet	>1,000 horizontal feet
Ranking Score (circle one)	20	10	0

Remediation Action Levels

Ranking Score (Circle One)	**>19**	**10 - 19**	**0 - 9**
Benzene		10 mg/kg	
BTEX (total)		50 mg/kg	
TPH (GRO and DRO)	100 mg/kg	1,000 mg/kg	5,000 mg/kg

Ranking Completed by: **Kijun Hong**
Date: **8/3/2018**

Sources:
GPS Conversion Tool
New Mexico Water Rights Reporting System – Water Column/Average Depth to Water Report
New Mexico Oil and Gas Map

Ranking Score Determination
Site Name: **Federal F1**
Legal Description: **Unit B, Section 16, T27N, R10W**
GPS Coordinates: **36.57987, -107.89777**

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00032		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	60	175
SJ 00033		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	204		
SJ 00034		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	170	65
SJ 03977 POD1		SJ	SJ	4	2	4	03	27N	10W	242760	4054481	3076	275	94	181
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	3685	310	50	260

Average Depth to Water: **93 feet**
Minimum Depth: **50 feet**
Maximum Depth: **170 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 240723.19 **Northing (Y):** 4052175.91 **Radius:** 5000

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

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 00032	3	2	2	08	27N	10W	239378	4053822*

Driller License: **Driller Company:**

Driller Name: CONLEY COX

Drill Start Date:	07/05/1953	**Drill Finish Date:**	07/11/1953	**Plug Date:**	
Log File Date:	12/16/1953	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	8.63	**Depth Well:**	235 feet	**Depth Water:**	60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	55	67	Sandstone/Gravel/Conglomerate
	165	195	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	55	67
	165	195

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

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	**Harvest Midstream**	OGRID	
Contact Name	**Kijun Hong**	Contact Telephone	**(505) 632-4475**
Contact email	**kijun.hong@williams.com**	Incident # *(assigned by OCD)*	NCS 1827631854
Contact mailing address	**1755 Arroyo Dr., Farmington, NM 87413**		

Location of Release Source

Latitude **36.597103** Longitude **-107.815218**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Hanks 17**	Site Type **Pipeline**
Date Release Discovered **9/17/2018**	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
M	**5**	**27N**	**9W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **104 Yards of impacted soil**	Volume Recovered (bbls) **104 Yards of impacted soil removed**
	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) **26.6 MCF**	Volume Recovered (Mcf) **0 MCF**
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

DISTRICT III
OCT 03 2018
NMOCD

(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? **Exceeded 50 cubic yards of contaminated soil removed per OCD guidance.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Cory Smith, Vanessa Field, and Jim Griswold were notified by email on 9/18/2018 by Kijun Hong.**	

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: 10/2/2018

email: kijun.hong@williams.com Telephone: 505-436-8457

OCD Only

Received by: Date: 10/3/18

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Williams Four Corners LLC	OGRID	
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	kijun.hong@williams.com	Incident # *(assigned by OCD)*	nDS1828937011
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.674729 Longitude -107.870416
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Trunk J	Site Type Pipeline
Date Release Discovered 8/24/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	11	28N	10W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 23 BBLs	Volume Recovered (bbls) 55 Yards of impacted soil removed
	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

Pipeline failure due to corrosion.

NMOCD
SEP 12 2018
DISTRICT III

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? **Unauthorized release exceeding 25 bbls of liquid that may with reasonable probability reach a watercourse.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Matt Webre (Williams) notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 8/24/2018 @ 3:47pm.**	

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: 9/7/2018

email: kijun.hong@williams.com Telephone: 505-436-8457

OCD Only

Received by: Date: 10/16/18

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

NMOCD
OCT 17 2018
DISTRICT III

Release Notification

Responsible Party

Responsible Party	Harvest Midstream Company	OGRID	
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # *(assigned by OCD)*	Incident NVF1829148087
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.604722 Longitude -107.853889
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MN Galt	Site Type Pipeline
Date Release Discovered 10/4/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
E	1	27N	10W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	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)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) Calculation in progress	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

(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? **Unauthorized natural gas release in a dry wash with reasonable potential to impact the wash. Initial investigation shows this to be a gas only release with no liquids.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Kijun Hong notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 10/5/2018 @ 9:56 am.**	

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: 10/16/2018

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

OCD Only

Received by: Date: 10/17/2018

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

NMOCD
OCT 17 2018
DISTRICT III

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)*	Sec H NVF1829149123
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.926192 Longitude -108.143259
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral A-15	Site Type Pipeline
Date Release Discovered 9/30/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
L	6	31N	12W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) Calculation in progress	Volume Recovered (bbls) Calculation in progress
	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) Calculation in progress	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

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? **Unauthorized release expected to exceed 25 bbls of liquid including historical impacts.**

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

Yes, Kijun Hong notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 10/1/2018 @ 12:09pm.

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: 10/15/2018

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

OCD Only

Received by: Date: 10/18/2018

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Harvest Midstream Company	OGRID 37388
Contact Name Kijun Hong	Contact Telephone 505-632-4475
Contact email khong@harvestmidstream.com	Incident # NCS1824348377
Contact mailing address 1755 Arroyo Dr., Farmington, NM 87413	

Location of Release Source

Latitude 36.57987 Longitude -107.89777
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Federal F1	Site Type Pipeline
Date Release Discovered 7/24/2018 @ 9:00 AM	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
B	16	27N	10W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	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)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 9.6451	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Failure of the pipeline. Upon discovery the pipe was isolated and blown down.

38

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Courtesy notification email sent 7/24/18	

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: _____

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	164 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 11/9/2018

email: khong@harvestmidstream.com Telephone: 505-635-4475

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Kijun Hong Date: 11/9/2018

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

OCD Only

Received by: OCD Date: 11/15/18

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: Cory Smith Date: 11/15/18

Printed Name: Cory Title: Environmental Spec.

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

October 30, 2018

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

RE: Request for Closure
Harvest Four Corners, LLC
Federal F1 Release
Incident Report: NCS1824348377
San Juan County, New Mexico

Dear Mr. Smith:

On behalf of Harvest Four Corners, LLC (Harvest), LT Environmental, Inc. (LTE) presents the following letter report detailing remediation and soil sampling activities at the Federal F1 (Site) in Unit B, Section 16, Township 27 North, Range 10 West, in San Juan County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after natural gas was released from a pipeline. The release was discovered on July 24, 2018. Upon discovery, the section of pipe was isolated and blown down. The release volume was estimated to be approximately 9.6451 thousand cubic feet (MCF) of natural gas. Williams Four Corners LLC (Williams) reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Attachment 1) on August 14, 2018. On October 1, 2018, Williams assets were purchased by Harvest who is proceeding with remediation and closure of the release. Based on the initial response efforts and the results of the confirmation soil sampling, Harvest is requesting no further action for this release event.

BACKGROUND

The final site characterization occurred after August 14, 2018; therefore, LTE applied Table 1, the *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) to determine remediation action levels. 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 and known aquifer properties. The nearest permitted water well, SJ 00032, is located approximately 1.3 miles northwest of the Site, with a depth to groundwater of 60 feet bgs and a total depth of 235 feet bgs. The water well is approximately 104 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is a first order tributary to an unnamed arroyo located approximately 40 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 an unstable area, 100-year floodplain, or overlying a subsurface mine. 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); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

EXCAVATION ACTIVITIES

On August 23, 2018, Harvest excavated impacted soil. The final excavation extent was approximately 1,320 square feet in area and extended to 27 feet bgs. The lateral extent of the remediation footprint was approximately 40 feet by 33 feet and is illustrated on Figure 2. Approximately 140 cubic yards of impacted soil were removed using a backhoe. Impacted soil was transported and properly disposed of at the Envirotech Landfarm #2 Facility in Bloomfield, New Mexico. Photographs of the final excavation extent are included as Attachment 2.

SOIL SAMPLING

Following removal of impacted soil, Harvest collected 5-point composite soil samples every 200 square feet or less from the sidewalls and floor of the excavation to document removal of impacted soil. Eight composite soil samples were collected. Soil sample locations are depicted on Figure 2. The samples were shipped to Hall Environmental Laboratories in Albuquerque, New Mexico, under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by EPA Method 8015M, and chloride by EPA Method 300.0.

ANALYTICAL RESULTS

Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were compliant with NMOCD Table 1 closure criteria in all soil samples. Chloride concentrations were below laboratory detection limit in all samples. TPH concentrations ranged from below the laboratory detection limit to 36 mg/kg in soil sample West Wall South End. BTEX concentrations ranged from below the laboratory detection limit to 2.9 mg/kg in soil sample West Wall South End. Laboratory analytical results are summarized in Table 1. Complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Approximately 140 cubic yards of impacted soil were excavated from the release footprint, and laboratory analytical results of eight confirmation soil samples indicated compliance with NMOCD Table 1 closure criteria. Following the receipt of soil sample laboratory analytical results, the excavation area was backfilled with clean imported fill material to match the pre-existing

grade. Based on the data collected, Harvest is requesting closure of this release per NMAC 19.15.29.12 Amended August 2018.

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

Sincerely,
LT ENVIRONMENTAL, INC.

Brooke Herb
Project Geologist

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

cc: Vanessa Fields, NMOCD
Whitney Thomas, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Site Map
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Report

FIGURES

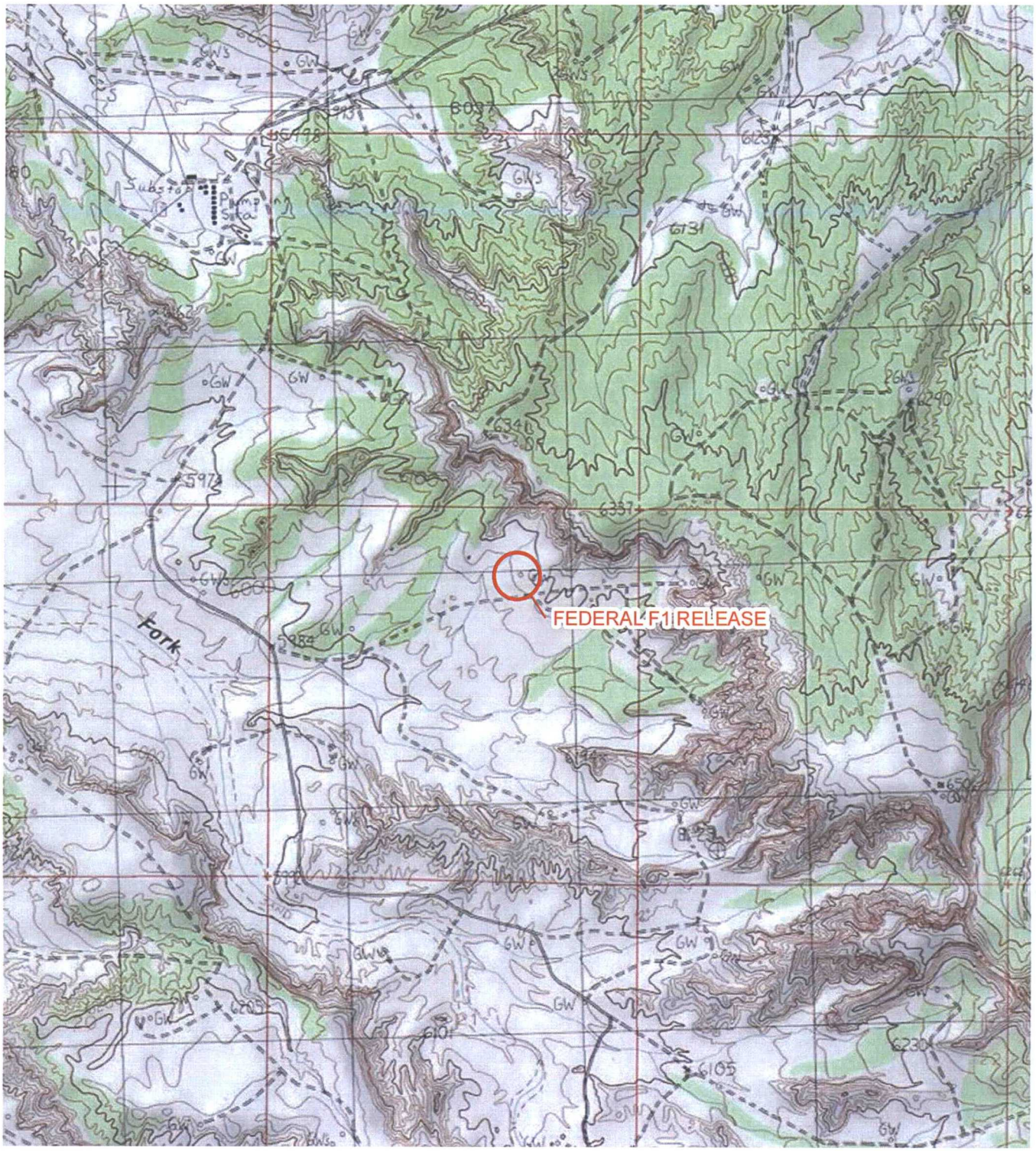


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
FEDERAL F1 RELEASE
UNIT B SEC 16 T27N R10W
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Midstream\GIS\MXD\090318004_FEDERAL F1\090318004_FIG01_SL_2018.mxd

IMAGE COURTESY OF ESRI

LEGEND

- REPRESENTATIVE LOCATION FOR 5-POINT COMPOSITE SOIL SAMPLE
- RELEASE LOCATION
- EXCAVATION EXTENT (40' X 33')

0 60 120

Feet

N

FIGURE 2
SITE MAP
FEDERAL F1 RELEASE
UNIT B SEC 16 T27N R10W
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Midstream\GIS\MXD\090318004_FEDERAL F1\090318004_FIG02_SITE_2018.mxd

TABLES

TABLE 1
SOIL ANALYTICAL RESULTS

FEDERAL F1 RELEASE
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

Sample Name	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Sum of GRO + DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
West Wall North End	8/23/2018	<0.024	0.096	0.048	0.36	0.504	18	10	<50	28	28	<30
North Bottom	8/23/2018	<0.025	0.054	<0.049	0.10	0.15	<4.9	<9.9	<49	<9.9	<49	<30
North Wall	8/23/2018	<0.025	<0.049	<0.049	<0.098	<0.098	<4.9	<10	<50	<10	<50	<30
East Wall South End	8/23/2018	<0.024	<0.047	<0.047	<0.095	<0.095	<4.7	<9.9	<49	<9.9	<49	<30
South Bottom	8/23/2018	<0.025	0.27	0.13	1.3	1.7	17	<9.8	<49	17	17	<30
South Wall	8/23/2018	<0.024	<0.048	<0.048	<0.096	<0.096	<4.8	<9.8	<49	<9.8	<49	<30
East Wall South End	8/23/2018	<0.023	<0.046	<0.046	<0.092	<0.092	<4.6	<10	<50	<10	<50	<30
West Wall South End	8/23/2018	0.048	0.72	0.21	1.9	2.9	36	<9.9	<50	36	36	<30
NMOCD Table 1 Closure Criteria		**10**	NE	NE	NE	**50**	NE	NE	NE	NE	**100**	**600**

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NE - not established

Table 1 - Closure Criteria for Soils Impacted by a Release per 19.15.29 August 2018

TPH - total petroleum hydrocarbons

< - indicates result is below laboratory detection limit

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Williams Four Corners LLC**	Contact: **Kijun Hong**
Address: **1755 Arroyo Dr., Farmington, NM 87413**	Telephone No.: **(505) 632-4475**
Facility Name: **Federal F1**	Facility Type: **Pipeline**

Surface Owner: **BLM**	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	**16**	**27N**	**10W**					**San Juan**

Latitude 36.57987 **Longitude** -107.89777

NATURE OF RELEASE

Type of Release: **Pipeline leak**	Volume of Release: **9.6451 MCF Natural Gas** **140 yards of impacted soil removed so far.**	Volume Recovered: **0 MCF Natural Gas** **140 yards of impacted soil removed so far.**
Source of Release: **Failed pipeline**	Date and Hour of Occurrence: **7/24/2018 @ 9:00AM**	Date and Hour of Discovery: **7/24/2018 @ 9:00AM**
Was Immediate Notice Given? ☐ Yes ☒ No ☐ Not Required	If YES, To Whom? **Courtesy Notification email sent 7/24/2018**	
By Whom? **NA**	Date and Hour: **NA**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.* **NA**

Describe Cause of Problem and Remedial Action Taken.*
Failure in the pipeline. Upon discovery, the section of pipe was isolated and blown down.

Describe Area Affected and Cleanup Action Taken.*
Remediation currently in progress. 140 yards of impacted soil have been removed so far.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: **Kijun Hong**		
Title: **Environmental Specialist**	Approval Date:	Expiration Date:
E-mail Address: **kijun.hong@williams.com**	Conditions of Approval:	Attached ☐
Date: **8/14/2018** Phone: **(505) 632-4475**		

* Attach Additional Sheets If Necessary

Ranking Score Determination
Site Name: **Federal F1**
Legal Description: **Unit B, Section 16, T27N, R10W**
GPS Coordinates: **36.57987, -107.89777**

Ranking Score based on NMOCD Guidelines for Remediation of Leaks, Spills, and Releases dated August 13, 1993.

Depth to Ground *- The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.*

Notes: **The nearest depth to water data was located 2,125 meters to the northwest with an altitude of 5,982ft and a depth to ground water of 55ft. Given that the release location is at an elevation of 6,086ft, it is assumed that the depth to ground water at the release location is 159ft.**

Depth to Groundwater	<50 feet	50 – 99 feet	>100 feet
Ranking Score (circle one)	20	10	0

Wellhead Protection Area **-** *The operator should determine the horizontal distance from all water sources including private and domestic water sources. Water sources are defined as wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.*

Notes: **There are no water sources within 1000ft from the release location.**

Wellhead Protection Area	<1000 from a water source; or <200 feet from a private domestic water source	
Ranking Score (circle one)	Yes → 20	No → 0

Distance To Nearest Surface Water Body **-** *The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes, ponds and playas.*

Notes: **The nearest surface water body to the release location is an intermittent stream 289.8ft to the northwest.**

Distance to Surface Water Body	<200 horizontal feet	200 – 1,000 horizontal feet	>1,000 horizontal feet
Ranking Score (circle one)	20	10	0

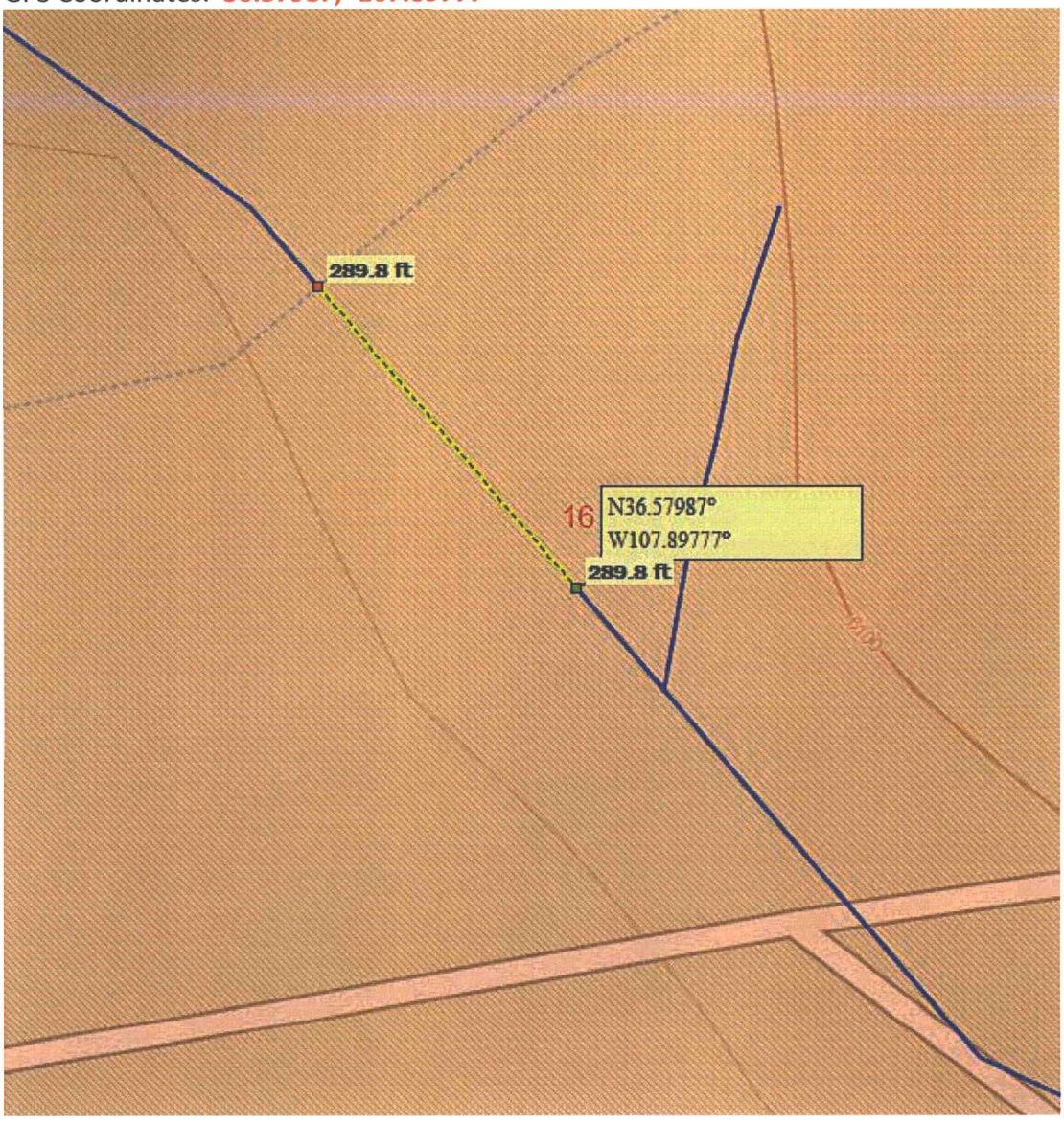
Remediation Action Levels

Ranking Score (Circle One)	**>19**	**10 - 19**	**0 - 9**
Benzene		10 mg/kg	
BTEX (total)		50 mg/kg	
TPH (GRO and DRO)	100 mg/kg	1,000 mg/kg	5,000 mg/kg

Ranking Completed by: **Kijun Hong**
Date: **8/3/2018**

Sources:
GPS Conversion Tool
New Mexico Water Rights Reporting System – Water Column/Average Depth to Water Report
New Mexico Oil and Gas Map

Ranking Score Determination
Site Name: **Federal F1**
Legal Description: **Unit B, Section 16, T27N, R10W**
GPS Coordinates: **36.57987, -107.89777**



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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00032		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	60	175
SJ 00033		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	204		
SJ 00034		SJ	SJ	3	2	2	08	27N	10W	239378	4053822*	2125	235	170	65
SJ 03977 POD1		SJ	SJ	4	2	4	03	27N	10W	242760	4054481	3076	275	94	181
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	3685	310	50	260

Average Depth to Water: **93 feet**

Minimum Depth: **50 feet**

Maximum Depth: **170 feet**

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 240723.19 **Northing (Y):** 4052175.91 **Radius:** 5000

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

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twn	Rng	(NAD83 UTM in meters) X	Y
	SJ 00032	3	2	2	08	27N	10W	239378	4053822*

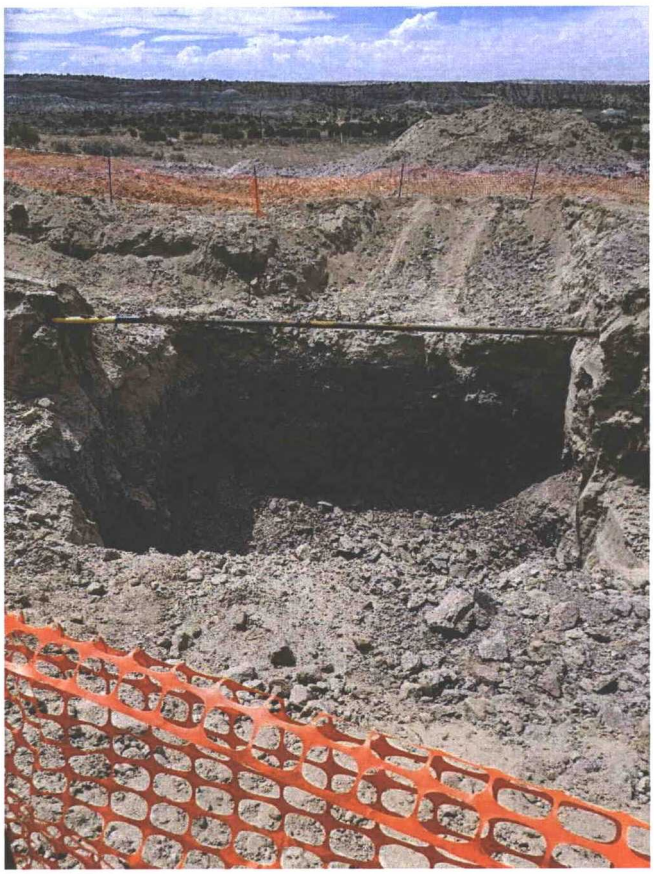
Driller License:		**Driller Company:**			
Driller Name:	CONLEY COX				
Drill Start Date:	07/05/1953	**Drill Finish Date:**	07/11/1953	**Plug Date:**	
Log File Date:	12/16/1953	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	8.63	**Depth Well:**	235 feet	**Depth Water:**	60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	55	67	Sandstone/Gravel/Conglomerate
	165	195	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	55	67
	165	195

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

ATTACHMENT 2: PHOTOGRAPHIC LOG



View northeast of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	LTE Advancing Opportunity
August 23, 2018	Photographic Log	

View southeast of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	LTE Advancing Opportunity
August 23, 2018	Photographic Log	

View east of the excavation

Project: 090318004	Harvest Four Corners, LLC Federal F1	LTE Advancing Opportunity
August 23, 2018	Photographic Log	

ATTACHMENT 3: LABORATORY 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

August 29, 2018

Kijun Hong
Williams Field Services
1755 Arroyo Dr.,
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: Federal F 1 Line Leak OrderNo.: 1808F09

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/24/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1808F09**
Date Reported: **8/29/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-001 **Matrix:** SOIL

Client Sample ID: West Wall North End
Collection Date: 8/23/2018 10:45:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 12:22:04 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	10	10		mg/Kg	1	8/27/2018 4:31:48 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 4:31:48 PM	39983
Surr: DNOP	120	50.6-138		%Rec	1	8/27/2018 4:31:48 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	18	4.7		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Surr: BFB	137	15-316		%Rec	1	8/27/2018 10:49:19 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Toluene	0.096	0.047		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Ethylbenzene	0.048	0.047		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Xylenes, Total	0.36	0.095		mg/Kg	1	8/27/2018 10:49:19 AM	39981
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	8/27/2018 10:49:19 AM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-002 **Matrix:** SOIL

Client Sample ID: North Bottom
Collection Date: 8/23/2018 10:55:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 1:24:06 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/27/2018 5:38:11 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 5:38:11 PM	39983
Surr: DNOP	117	50.6-138		%Rec	1	8/27/2018 5:38:11 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Surr: BFB	98.4	15-316		%Rec	1	8/27/2018 11:12:42 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Toluene	0.054	0.049		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Ethylbenzene	ND	0.049		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Xylenes, Total	0.10	0.098		mg/Kg	1	8/27/2018 11:12:42 AM	39981
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	8/27/2018 11:12:42 AM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-003 **Matrix:** SOIL

Client Sample ID: North Wall
Collection Date: 8/23/2018 11:00:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 1:36:31 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/27/2018 6:00:21 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 6:00:21 PM	39983
Surr: DNOP	119	50.6-138		%Rec	1	8/27/2018 6:00:21 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/27/2018 11:36:00 AM	39981
Surr: BFB	89.0	15-316		%Rec	1	8/27/2018 11:36:00 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/27/2018 11:36:00 AM	39981
Toluene	ND	0.049		mg/Kg	1	8/27/2018 11:36:00 AM	39981
Ethylbenzene	ND	0.049		mg/Kg	1	8/27/2018 11:36:00 AM	39981
Xylenes, Total	ND	0.098		mg/Kg	1	8/27/2018 11:36:00 AM	39981
Surr: 4-Bromofluorobenzene	91.3	80-120		%Rec	1	8/27/2018 11:36:00 AM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-004 **Matrix:** SOIL

Client Sample ID: East Wall South End
Collection Date: 8/23/2018 11:10:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 1:48:55 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/27/2018 6:22:22 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 6:22:22 PM	39983
Surr: DNOP	124	50.6-138		%Rec	1	8/27/2018 6:22:22 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/27/2018 11:59:22 AM	39981
Surr: BFB	95.3	15-316		%Rec	1	8/27/2018 11:59:22 AM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/27/2018 11:59:22 AM	39981
Toluene	ND	0.047		mg/Kg	1	8/27/2018 11:59:22 AM	39981
Ethylbenzene	ND	0.047		mg/Kg	1	8/27/2018 11:59:22 AM	39981
Xylenes, Total	ND	0.095		mg/Kg	1	8/27/2018 11:59:22 AM	39981
Surr: 4-Bromofluorobenzene	93.3	80-120		%Rec	1	8/27/2018 11:59:22 AM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-005 **Matrix:** SOIL

Client Sample ID: South Bottom
Collection Date: 8/23/2018 11:20:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 2:01:19 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/27/2018 6:44:35 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 6:44:35 PM	39983
Surr: DNOP	120	50.6-138		%Rec	1	8/27/2018 6:44:35 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	17	5.0		mg/Kg	1	8/27/2018 12:22:50 PM	39981
Surr: BFB	116	15-316		%Rec	1	8/27/2018 12:22:50 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	8/27/2018 12:22:50 PM	39981
Toluene	0.27	0.050		mg/Kg	1	8/27/2018 12:22:50 PM	39981
Ethylbenzene	0.13	0.050		mg/Kg	1	8/27/2018 12:22:50 PM	39981
Xylenes, Total	1.3	0.099		mg/Kg	1	8/27/2018 12:22:50 PM	39981
Surr: 4-Bromofluorobenzene	96.1	80-120		%Rec	1	8/27/2018 12:22:50 PM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-006 **Matrix:** SOIL

Client Sample ID: South Wall
Collection Date: 8/23/2018 11:30:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	30		mg/Kg	20	8/28/2018 2:13:44 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/27/2018 7:06:32 PM	39983
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/27/2018 7:06:32 PM	39983
Surr: DNOP	112	50.6-138		%Rec	1	8/27/2018 7:06:32 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Surr: BFB	91.9	15-316		%Rec	1	8/27/2018 12:46:18 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.024		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Toluene	ND	0.048		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Ethylbenzene	ND	0.048		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Xylenes, Total	ND	0.096		mg/Kg	1	8/27/2018 12:46:18 PM	39981
Surr: 4-Bromofluorobenzene	93.3	80-120		%Rec	1	8/27/2018 12:46:18 PM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-007 **Matrix:** SOIL

Client Sample ID: East Wall South End
Collection Date: 8/23/2018 11:40:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	ND	30		mg/Kg	20	8/28/2018 2:26:09 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/27/2018 7:28:44 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 7:28:44 PM	39983
Surr: DNOP	115	50.6-138		%Rec	1	8/27/2018 7:28:44 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Surr: BFB	93.8	15-316		%Rec	1	8/27/2018 1:09:44 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Benzene	ND	0.023		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Toluene	ND	0.046		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Ethylbenzene	ND	0.046		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Xylenes, Total	ND	0.092		mg/Kg	1	8/27/2018 1:09:44 PM	39981
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	8/27/2018 1:09:44 PM	39981

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: Williams Field Services
Project: Federal F 1 Line Leak
Lab ID: 1808F09-008 **Matrix:** SOIL

Client Sample ID: West Wall South End
Collection Date: 8/23/2018 11:50:00 AM
Received Date: 8/24/2018 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	8/28/2018 2:38:33 PM	40017
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/27/2018 7:50:44 PM	39983
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/27/2018 7:50:44 PM	39983
Surr: DNOP	121	50.6-138		%Rec	1	8/27/2018 7:50:44 PM	39983
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	36	4.7		mg/Kg	1	8/27/2018 1:33:12 PM	39981
Surr: BFB	151	15-316		%Rec	1	8/27/2018 1:33:12 PM	39981
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.048	0.023		mg/Kg	1	8/27/2018 1:33:12 PM	39981
Toluene	0.72	0.047		mg/Kg	1	8/27/2018 1:33:12 PM	39981
Ethylbenzene	0.21	0.047		mg/Kg	1	8/27/2018 1:33:12 PM	39981
Xylenes, Total	1.9	0.093		mg/Kg	1	8/27/2018 1:33:12 PM	39981
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	8/27/2018 1:33:12 PM	39981

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#: **1808F09**

29-Aug-18

Client: Williams Field Services

Project: Federal F 1 Line Leak

Sample ID	**MB-40017**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**40017**	RunNo:	**53754**					
Prep Date:	**8/28/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1774320**	Units:	**mg/Kg**			

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

Sample ID	**LCS-40017**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**40017**	RunNo:	**53754**					
Prep Date:	**8/28/2018**	Analysis Date:	**8/28/2018**	SeqNo:	**1774322**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	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#: **1808F09**

29-Aug-18

Client: Williams Field Services

Project: Federal F 1 Line Leak

Sample ID **MB-39983**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **39983**	RunNo: **53721**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1772381** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	50.6	138			

Sample ID **1808F09-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **West Wall North En**	Batch ID: **39983**	RunNo: **53721**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1773142** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.8	48.97	10.16	94.9	53.5	126			
Surr: DNOP	5.9		4.897		120	50.6	138			

Sample ID **1808F09-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **West Wall North En**	Batch ID: **39983**	RunNo: **53721**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1773143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	9.9	49.26	10.16	110	53.5	126	12.9	21.7	
Surr: DNOP	6.7		4.926		135	50.6	138	0	0	

Sample ID **LCS-39983**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **39983**	RunNo: **53721**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1773347** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.8		5.000		115	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#: **1808F09**

29-Aug-18

Client: Williams Field Services

Project: Federal F 1 Line Leak

Sample ID **MB-39981**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **39981**	RunNo: **53734**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1772556** 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	940		1000		93.6	15	316			

Sample ID **LCS-39981**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **39981**	RunNo: **53734**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1772557** 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	75.9	131			
Surr: BFB	1100		1000		106	15	316			

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#: **1808F09**

29-Aug-18

Client: Williams Field Services

Project: Federal F 1 Line Leak

Sample ID **MB-39981**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **39981**	RunNo: **53734**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1772586** 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	0.96		1.000		96.4	80	120			

Sample ID **LCS-39981**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **39981**	RunNo: **53734**
Prep Date: **8/24/2018**	Analysis Date: **8/27/2018**	SeqNo: **1772587** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.0	77.3	128			
Toluene	0.96	0.050	1.000	0	96.2	79.2	125			
Ethylbenzene	0.96	0.050	1.000	0	96.0	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.6	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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: WILLIAMS FIELD SERVI Work Order Number: 1808F09 RcptNo: 1

Received By: **Jazzmine Burkhead** 8/23/2018 7:45:00 AM

Completed By: **Ashley Gallegos** 8/24/2018 9:05:58 AM

Reviewed By: JAB 08/24/18 labeled by: IO 08/24/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (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: IO 08/24/2018 (<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	4.6	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 1755 ARROYA DR
Bloomfield NM 87413

Phone #: 505-632-4475

email or Fax#: Kijun.Hong@williams.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 8-28-2018
☐ Standard ☑ Rush 3 day

Project Name: Federal F-1 Line Leak

Project #:

Project Manager: Kijun Hong

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.6

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1808F09	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
8/23/18	1045	Soil	West Wall North End	1-402	Cool	-001	X		X									X				
8/23/18	1055	Soil	North Bottom	1-402		-002	X		X									X				
8/23/18	1100	Soil	North wall	1-402		-003	X		X									X				
8/23/18	1110	Soil	East wall South End	1-402		-004	X		X									X				
8/23/18	1120	Soil	South Bottom	1-402		-005	X		X									X				
8/23/18	1130	Soil	South wall	1-402		-006	X		X									X				
8/23/18	1140	Soil	East wall South End	1-402		-007	X		X									X				
8/23/18	1150	Soil	West wall South End	1-402		-008	X		X									X				

Date	Time	Relinquished by	Received by	Date	Time
8/23/18	1517	Morgan Killion	Christine Walker	8/23/18	1517
8/23/18	1901	Christine Walker	Jennifer Burkhart	08/24/18	07:45

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.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Harvest Midstream Company	OGRID 37388
Contact Name Kijun Hong	Contact Telephone 505-632-4475
Contact email khong@harvestmidstream.com	Incident # *NCS1825436405*
Contact mailing address 1755 Arroyo Dr., Farmington, NM 87413	

Location of Release Source

Latitude 36.615481 Longitude -107.915998
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Snick Com 32-2A	Site Type Pipeline on producer location
Date Release Discovered 8/8/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	32	28N	10W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 503	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Failure of the pipeline due to corrosion.

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? Unauthorized release of gases exceeding 500 MCF.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Upon discovery, courtesy notification was given to Cry Smith and Vanessa Fields via email by Kijun Hong on 8/9/2018. When as initial gas loss calculation was determined, an update was given by email to include Jim Griswold on 8/29/2018.	

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: 8/31/2018

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	95 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 11/9/2018

email: khong@harvestmidstream.com Telephone: 505-635-4475

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 11/9/2018

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

OCD Only

Received by: OCD Date: 11/13/18

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: 11/15/18

Printed Name: Cory Title: Environmental Spec.

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

October 31, 2018

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

RE: Request For Closure
Harvest Four Corners, LLC
Snick Com 32-2A Release
Incident Number: NCS1825436405
San Juan County, New Mexico

Dear Mr. Smith:

On behalf of Harvest Four Corners, LLC (Harvest), LT Environmental, Inc. (LTE) presents the following letter report detailing remediation and soil sampling activities at the Snick Com 32-2A (Site) in Unit J, Section 32, Township 28 North, Range 10 West, in San Juan County, New Mexico (Figure 1). The purpose of the excavation and soil sampling activities was to address impacts to soil after an unknown amount of produced water and approximately 503 thousand cubic feet (MCF) of natural gas were released from a gathering pipeline on the Mustang Resources, LLC Snick Com 32 #002A well pad. The release was discovered on August 8, 2018. Upon discovery, the section of pipe was isolated and blown down. Williams Four Corners LLC (Williams) reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 (Attachment 1) on August 31, 2018. On October 1, 2018, Williams assets were purchased by Harvest who is proceeding with remediation and closure of the release. Based on the initial response efforts and the results of the confirmation soil sampling, Harvest is requesting no further action for this release event.

BACKGROUND

The final site characterization occurred after August 14, 2018; therefore, LTE applied Table 1, the *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) to determine remediation action levels. Depth to groundwater at the Site is estimated to be between 50 feet and 100 feet below ground surface (bgs) based on the nearest water well data and known aquifer properties. The nearest permitted water well, SJ 00032, is located approximately 1.48 miles south of the Site, with a depth to groundwater of 60 feet bgs and a total depth of 235 feet bgs. The water well is approximately 35 feet lower in elevation than the Site. The closest continuously flowing water or significant watercourse to the Site is a first order tributary to an unnamed arroyo located approximately 265 feet southwest 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 an unstable area, 100-year floodplain, or overlying a subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply:

Benzene	10 milligrams per kilogram (mg/kg)
Total benzene, toluene, ethylbenzene, and total xylenes (BTEX)	50 mg/kg
Total petroleum hydrocarbons (TPH)	100 mg/kg
Chloride	600 mg/kg

EXCAVATION ACTIVITIES

On September 4, 2018, Harvest excavated impacted soil. The final excavation extent was approximately 250 square feet in area and extended to 8 feet bgs. The lateral extent of the remediation footprint was approximately 25 feet by 10 feet and is illustrated on Figure 2. Approximately 48 cubic yards of impacted soil were removed using a backhoe. Impacted soil was transported and properly disposed of at the Envirotech Landfarm #2 Facility in Bloomfield, New Mexico. Photographs of the final excavation extent are included as Attachment 2.

SOIL SAMPLING

Following the removal of impacted soil, Harvest collected a 5-point composite soil sample from the sidewall and a 5-point composite soil sample from the floor of the excavation to document removal of impacted soil. Soil sample locations are depicted on Figure 2. The samples were shipped to Hall Environmental Laboratories in Albuquerque, New Mexico, under strict chain-of-custody procedures for analysis of BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil range organics (MRO) by EPA Method 8015M, and chloride by EPA Method 300.0.

ANALYTICAL RESULTS

Laboratory analytical results indicated BTEX, TPH, and chloride concentrations were compliant with NMOCD Table 1 closure criteria in all soil samples. Chloride and total TPH concentrations were below laboratory detection limit in both samples. BTEX concentrations ranged from below the laboratory detection limit in the floor sample and 0.48 mg/kg in the wall sample. Laboratory analytical results are summarized in Table 1. Complete laboratory analytical reports are included as Attachment 3.

CONCLUSIONS

Approximately 48 cubic yards of impacted soil were excavated from the release footprint, and laboratory analytical results of confirmation soil samples indicated compliance with NMOCD Table 1 closure criteria. Following the receipt of soil sample laboratory analytical results, the excavation area was backfilled with clean imported fill material to match the pre-existing grade. Based on the data collected, Harvest is requesting closure of this release per NMAC rule 19.15.29.12 Amended August 2018.

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

Sincerely,
LT ENVIRONMENTAL, INC.

Brooke Herb
Project Geologist

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

cc: Vanessa Fields, NMOCD
Jim Griswold, NMOCD
Whitney Thomas, BLM

Attachments:

Figure 1	Site Location Map
Figure 2	Soil Sample Locations
Table 1	Soil Analytical Results
Attachment 1	Initial/Final NMOCD Form C-141
Attachment 2	Photographic Log
Attachment 3	Laboratory Analytical Report

FIGURES

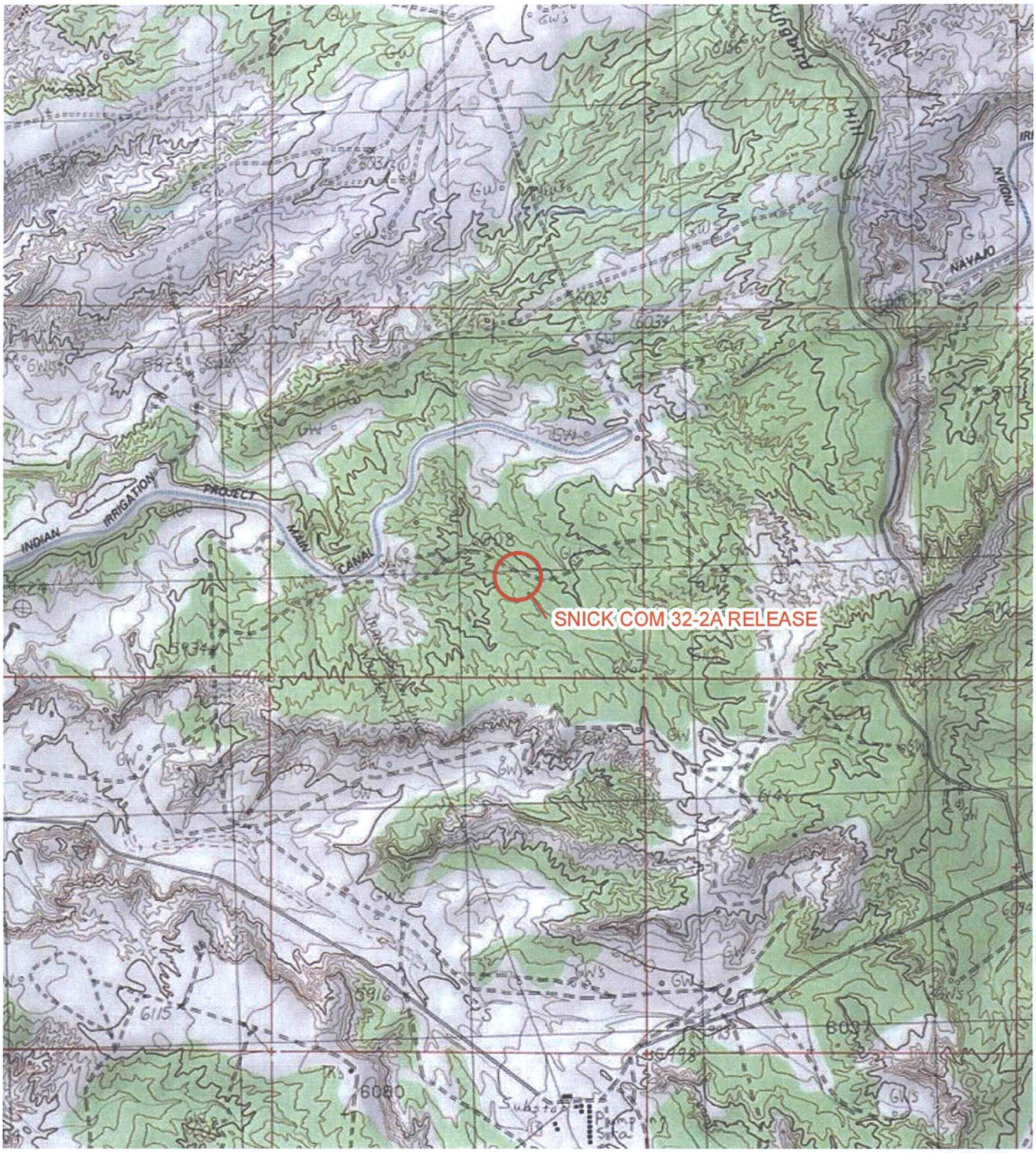


IMAGE COURTESY OF ESRI/USGS

LEGEND

SITE LOCATION

0 2,000 4,000

Feet

N

NEW MEXICO

FIGURE 1
SITE LOCATION MAP
SNICK COM 32-2A RELEASE
UNIT J SEC 32 T28N R10W
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Midstream\GIS\MXD\090318005_SNICK_COM 32-2A\090318005_FIG01_SL_2018.mxd

IMAGE COURTESY OF GOOGLE EARTH 2015

LEGEND

- RELEASE LOCATION
- COMPOSITE FLOOR SAMPLE ALIQUOT
- COMPOSITE SIDEWALL SAMPLE ALIQUOT
- EXCAVATION EXTENT (25' X 10')

0 30 60

Feet

N

FIGURE 2
SOIL SAMPLE LOCATIONS
SNICK COM 32-2A RELEASE
UNIT J SEC 32 T28N R10W
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

P:\Harvest Midstream\GIS\MXD\090318005_SNICK_COM 32-2A\090318005_FIG02_SITE_2018.mxd

TABLE

TABLE 1
SOIL ANALYTICAL RESULTS

SNICK COM 32-2A RELEASE
SAN JUAN COUNTY, NEW MEXICO
HARVEST FOUR CORNERS, LLC

Sample Name	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
Snick Com 32-2A Floor	9/4/2018	<0.10	<0.21	<0.21	<0.42	<0.42	<21	<9.8	<49	<49	<30
Snick Com 32-2A Side Wall	9/4/2018	<0.09	0.26	<0.18	0.48	0.74	<18	<9.8	<49	<49	<30
NMOCD Table 1 Closure Criteria		**10**	NE	NE	NE	**50**	NE	NE	NE	**100**	**600**

Notes:

BTEX - benzene, toluene, ethylbenzene, and total xylenes

DRO - diesel range organics

GRO - gasoline range organics

mg/kg - milligrams per kilogram

MRO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NE - not established

Table 1 - Closure Criteria for Soils Impacted by a Release per 19.15.29 August 2018

< - indicates result is below laboratory detection limit

ATTACHMENT 1: INITIAL/FINAL NMOCD FORM C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party **Williams Four Corners LLC**	OGRID 37388
Contact Name **Kijun Hong**	Contact Telephone **(505) 632-4475**
Contact email **kijun.hong@williams.com**	Incident # *NCS1825436405*
Contact mailing address **1755 Arroyo Dr., Farmington, NM 87413**	

Location of Release Source

Latitude **36.615481** Longitude **-107.915998**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Snick Com 32-2A**	Site Type **Pipeline on producer location**
Date Release Discovered **8/8/2018**	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	**32**	**28N**	**10W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **Unknown at this time**	Volume Recovered (bbls) **Remediation in progress**
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) **503**	Volume Recovered (Mcf) **0**
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Failure of pipeline due to corrosion.

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? [X] Yes [ ] No	If YES, for what reason(s) does the responsible party consider this a major release? **Unauthorized release of gases exceeding 500 MCF**

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

Upon discovery, courtesy notification was given to Cory Smith and Vanessa Fields via email by Kijun Hong on 8/9/2018. When an initial gas loss calculation was determined, an update was given by email to include Jim Griswold on 8/29/2018.

Initial Response

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

[X] The source of the release has been stopped.

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

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

[X] 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: **8/31/2018**

email: **kijun.hong@williams.com** Telephone: **505-632-4475**

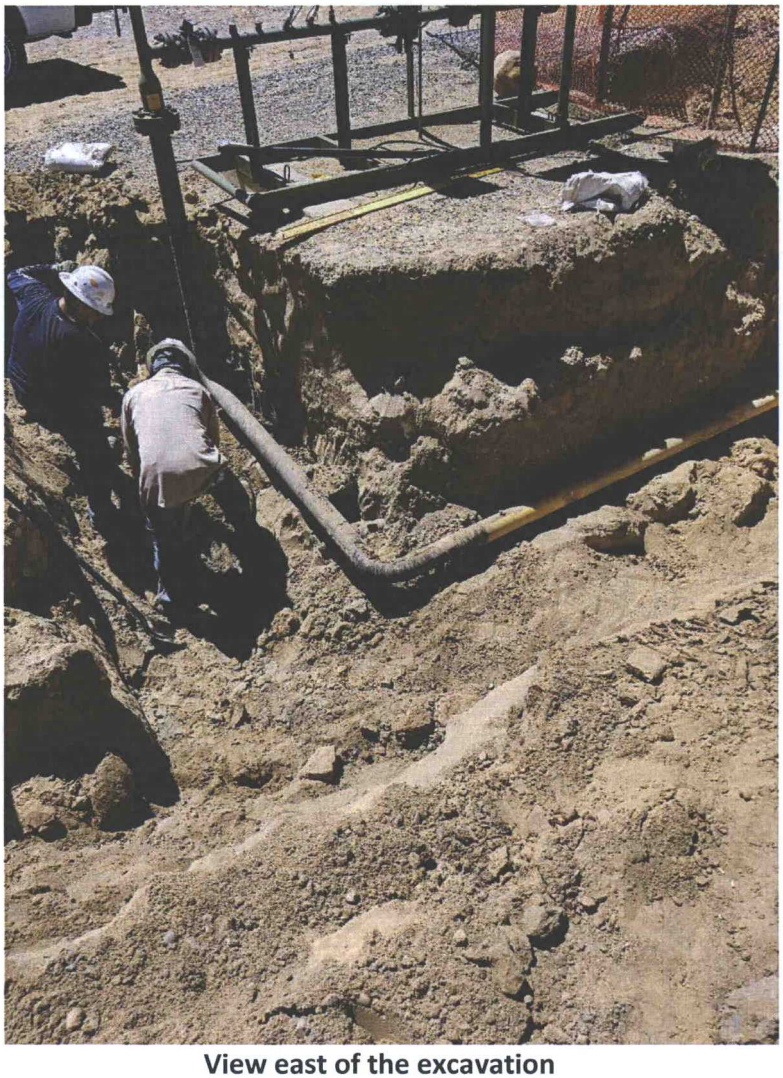
OCD Only

Received by: Date:

ATTACHMENT 2: PHOTOGRAPHIC LOG

View of release point in excavation

Project: 090318005	Harvest Four Corners, LLC Snick Com 32-2A Release	LTE Advancing Opportunity
September 4, 2018	Photographic Log	



View east of the excavation

Project: 090318005	Harvest Four Corners, LLC Snick Com 32-2A Release	LTE Advancing Opportunity
September 4, 2018	Photographic Log	

ATTACHMENT 3: LABORATORY 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

September 11, 2018

Kijun Hong
Williams Field Services
188 Co. Rd 4900
Bloomfield, NM 87413
TEL:
FAX

RE: Snick Com 32-2A

OrderNo.: 1809065

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/5/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1809065**
Date Reported: **9/11/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Snick Com 32-2A
Lab ID: 1809065-001 **Matrix:** SOIL

Client Sample ID: Snick Com 32-2A Floor
Collection Date: 9/4/2018 1:55:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/5/2018 10:54:58 AM	40145
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/5/2018 9:47:13 AM	40144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/5/2018 9:47:13 AM	40144
Surr: DNOP	103	50.6-138		%Rec	1	9/5/2018 9:47:13 AM	40144
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	9/5/2018 10:21:10 AM	G53917
Surr: BFB	94.0	15-316		%Rec	5	9/5/2018 10:21:10 AM	G53917
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Toluene	ND	0.21		mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Ethylbenzene	ND	0.21		mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Xylenes, Total	ND	0.42		mg/Kg	5	9/5/2018 10:21:10 AM	B53917
Surr: 4-Bromofluorobenzene	90.0	80-120		%Rec	5	9/5/2018 10:21:10 AM	B53917

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: Williams Field Services
Project: Snick Com 32-2A
Lab ID: 1809065-002 **Matrix:** SOIL

Client Sample ID: Snick Com 32-2A Side Wall
Collection Date: 9/4/2018 1:50:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/5/2018 11:07:23 AM	40145
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/5/2018 10:11:31 AM	40144
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/5/2018 10:11:31 AM	40144
Surr: DNOP	91.0	50.6-138		%Rec	1	9/5/2018 10:11:31 AM	40144
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	18		mg/Kg	5	9/5/2018 10:44:28 AM	G53917
Surr: BFB	96.3	15-316		%Rec	5	9/5/2018 10:44:28 AM	G53917
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.090		mg/Kg	5	9/5/2018 10:44:28 AM	B53917
Toluene	0.26	0.18		mg/Kg	5	9/5/2018 10:44:28 AM	B53917
Ethylbenzene	ND	0.18		mg/Kg	5	9/5/2018 10:44:28 AM	B53917
Xylenes, Total	0.48	0.36		mg/Kg	5	9/5/2018 10:44:28 AM	B53917
Surr: 4-Bromofluorobenzene	88.6	80-120		%Rec	5	9/5/2018 10:44:28 AM	B53917

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#: **1809065**

11-Sep-18

Client: Williams Field Services

Project: Snick Com 32-2A

Sample ID **MB-40145**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **40145**	RunNo: **53927**
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781197** Units: **mg/Kg**

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

Sample ID **LCS-40145**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **40145**	RunNo: **53927**
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781198** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	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#: **1809065**

11-Sep-18

Client: Williams Field Services

Project: Snick Com 32-2A

Sample ID **MB-40144**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40144**	RunNo: **53915**
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1779402** 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	50.6	138			

Sample ID **LCS-40144**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40144**	RunNo: **53915**
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1779424** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.8	70	130			
Surr: DNOP	4.8		5.000		96.2	50.6	138			

Sample ID **MB-40111**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40111**	RunNo: **53915**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780862** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		110	50.6	138			

Sample ID **LCS-40111**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40111**	RunNo: **53915**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780884** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		113	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#: **1809065**

11-Sep-18

Client: Williams Field Services

Project: Snick Com 32-2A

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G53917**	RunNo: **53917**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1780252** 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	930		1000		92.8	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G53917**	RunNo: **53917**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1780253** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	75.9	131			
Surr: BFB	1000		1000		100	15	316			

Sample ID **MB-40113**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **40113**	RunNo: **53917**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780256** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		95.7	15	316			

Sample ID **LCS-40113**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **40113**	RunNo: **53917**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780257** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		104	15	316			

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#: **1809065**

11-Sep-18

Client: Williams Field Services

Project: Snick Com 32-2A

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B53917**	RunNo: **53917**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1780290** 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		88.0	80	120			

Sample ID **100NG BTEX LCSB**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B53917**	RunNo: **53917**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1780291** 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	84.4	77.3	128			
Toluene	0.87	0.050	1.000	0	86.7	79.2	125			
Ethylbenzene	0.85	0.050	1.000	0	85.2	80.7	127			
Xylenes, Total	2.6	0.10	3.000	0	87.2	81.6	129			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	80	120			

Sample ID **MB-40113**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **40113**	RunNo: **53917**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780294** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.0	80	120			

Sample ID **LCS-40113**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **40113**	RunNo: **53917**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1780295** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	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: WILLIAMS FIELD SERVI Work Order Number: 1809065 RcptNo: 1

Received By: Anne Thorne 9/5/2018 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 9/5/2018 7:32:01 AM Anne Thorne

Reviewed By: JO 9/05/18

Labeled by: AS 09/05/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (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
3	1.3	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: WFS	Turn-Around Time: 9-5-18 ☐ Standard ☑ Rush 1 day
	Project Name: SNICK COM 32-2A
Mailing Address: 1755 ARROYO DR. Bloom Field NM 87413	Project #:
Phone #: 505-632	
email or Fax#: Kijon.Hong@williams.com	Project Manager: KIJON HONG
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	Sampler: morgan Killion
Accreditation ☐ NELAP ☐ Other	On Ice: ☑ Yes ☐ No
☐ EDD (Type)	Sample Temperature: 2.5+0.1=1.3

Date	Time	Matrix	Sample Request ID	Container Type and # (AT 09105/18)	Preservative Type (3 coolers)	HEAL No	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
9/4/18	1:55	soil	SNICK COM 32-2A Floor	1-402 MeOH kit	Cool	001	X		X									X				
9/4/18	1:50	soil	SNICK COM 32-2A Sidewall	1-402	↓	002	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/4/18	1458	Morgan Killion	Christin Waeta	9/4/18	1458
9/4/18	1917	Christin Waeta		09105/18	0700

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.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 36.449293 Longitude -107.392803
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral H-8	Site Type Pipeline
Date Release Discovered 11/29/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
A	31	26N	5W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 0.24	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls) 0.71	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 22.97	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

RECEIVED
DEC 21 2018
DISTRICT III

NMOCD

13

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? **May with reasonable probability reach a watercourse. Possible ground water impacts.**

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

Yes, Monica Sandoval spoke with Vanessa Fields via phone on 11/29/2018 @ 7:35PM. Kijun Hong notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 11/30/2018 @ 12:34PM.

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: 12/17/2018

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

OCD Only

Received by: Cory Smith Date: 1/3/19

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

December 10, 2018

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

RE: Lateral H 8 OrderNo.: 1812374

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/7/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1812374**
Date Reported: **12/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lateral H 8
Lab ID: 1812374-001 **Matrix:** SOIL

Client Sample ID: North Wall Composite
Collection Date: 12/6/2018 10:00:00 AM
Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	43	30		mg/Kg	20	12/7/2018 11:26:35 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/7/2018 11:08:00 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:08:00 AM	41962
Surr: DNOP	93.2	50.6-138		%Rec	1	12/7/2018 11:08:00 AM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Surr: BFB	101	73.8-119		%Rec	1	12/7/2018 10:26:38 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Toluene	ND	0.031		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Ethylbenzene	ND	0.031		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Xylenes, Total	ND	0.062		mg/Kg	1	12/7/2018 10:26:38 AM	41948
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	12/7/2018 10:26:38 AM	41948

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

Analytical Report
Lab Order **1812374**
Date Reported: **12/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lateral H 8
Lab ID: 1812374-002 **Matrix:** SOIL

Client Sample ID: West Wall Composite
Collection Date: 12/6/2018 10:10:00 AM
Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	12/7/2018 11:38:59 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2018 11:29:54 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:29:54 AM	41962
Surr: DNOP	95.4	50.6-138		%Rec	1	12/7/2018 11:29:54 AM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Surr: BFB	94.7	73.8-119		%Rec	1	12/7/2018 10:50:11 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.015		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Toluene	ND	0.030		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Ethylbenzene	ND	0.030		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Xylenes, Total	ND	0.060		mg/Kg	1	12/7/2018 10:50:11 AM	41948
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/7/2018 10:50:11 AM	41948

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: Lateral H 8
Lab ID: 1812374-003 **Matrix:** SOIL

Client Sample ID: South Wall Composite
Collection Date: 12/6/2018 10:20:00 AM
Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	30	30		mg/Kg	20	12/7/2018 11:51:24 AM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/7/2018 11:52:04 AM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 11:52:04 AM	41962
Surr: DNOP	99.1	50.6-138		%Rec	1	12/7/2018 11:52:04 AM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Surr: BFB	93.1	73.8-119		%Rec	1	12/7/2018 11:13:47 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.015		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Toluene	ND	0.029		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Ethylbenzene	ND	0.029		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Xylenes, Total	ND	0.059		mg/Kg	1	12/7/2018 11:13:47 AM	41948
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	12/7/2018 11:13:47 AM	41948

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: Lateral H 8
Lab ID: 1812374-004 **Matrix:** SOIL

Client Sample ID: East Wall Composite
Collection Date: 12/6/2018 10:30:00 AM
Received Date: 12/7/2018 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	200	30		mg/Kg	20	12/7/2018 12:03:48 PM	41969
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/7/2018 12:13:55 PM	41962
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/7/2018 12:13:55 PM	41962
Surr: DNOP	92.8	50.6-138		%Rec	1	12/7/2018 12:13:55 PM	41962
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	12/7/2018 11:37:28 AM	41948
Surr: BFB	95.6	73.8-119		%Rec	1	12/7/2018 11:37:28 AM	41948
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.016		mg/Kg	1	12/7/2018 11:37:28 AM	41948
Toluene	ND	0.032		mg/Kg	1	12/7/2018 11:37:28 AM	41948
Ethylbenzene	ND	0.032		mg/Kg	1	12/7/2018 11:37:28 AM	41948
Xylenes, Total	ND	0.064		mg/Kg	1	12/7/2018 11:37:28 AM	41948
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/7/2018 11:37:28 AM	41948

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#: **1812374**

10-Dec-18

Client: Harvest

Project: Lateral H 8

Sample ID **MB-41969**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **41969**	RunNo: **56164**
Prep Date: **12/7/2018**	Analysis Date: **12/7/2018**	SeqNo: **1877391** Units: **mg/Kg**

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

Sample ID **LCS-41969**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **41969**	RunNo: **56164**
Prep Date: **12/7/2018**	Analysis Date: **12/7/2018**	SeqNo: **1877392** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1812374**

10-Dec-18

Client: Harvest

Project: Lateral H 8

Sample ID **LCS-41962**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **41962**	RunNo: **56137**
Prep Date: **12/7/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876105** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.4	70	130			
Surr: DNOP	4.2		5.000		84.7	50.6	138			

Sample ID **MB-41962**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **41962**	RunNo: **56137**
Prep Date: **12/7/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876106** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	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#: **1812374**

10-Dec-18

Client: Harvest

Project: Lateral H 8

Sample ID **MB-41948**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **41948**	RunNo: **56167**
Prep Date: **12/6/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876979** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.1	73.8	119			

Sample ID **LCS-41948**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **41948**	RunNo: **56167**
Prep Date: **12/6/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876980** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	80.1	123			
Surr: BFB	1100		1000		108	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1812374**

10-Dec-18

Client: Harvest
Project: Lateral H 8

Sample ID **MB-41948**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **41948**	RunNo: **56167**
Prep Date: **12/6/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876984** 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		102	80	120			

Sample ID **LCS-41948**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **41948**	RunNo: **56167**
Prep Date: **12/6/2018**	Analysis Date: **12/7/2018**	SeqNo: **1876985** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.0	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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: 1812374 | RcptNo: 1

Received By: Anne Thorne 12/7/2018 9:00:00 AM Anne Thorne

Completed By: Anne Thorne 12/7/2018 9:03:13 AM Anne Thorne

Reviewed By: ENM 12/7/18

Labeled by: AT 12/07/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (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			
2	1.0	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@Harvest midstream.com

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

Accreditation: ☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: same day ☐ Standard ☑ Rush

Project Name: Lateral H-8

Project #:

Project Manager: KiJUN HONG

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

Sample Temperature: 2

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1812374	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
12/6/18	1000	Soil	North wall Composite	1-4oz	Cool	-001	X		X									X				
12/6/18	1010	Soil	West wall Composite	1-4oz		-002	X		X									X				
12/6/18	1020	Soil	South wall Composite	1-4oz		-003	X		X									X				
12/6/18	1030	Soil	East wall Composite	1-4oz		-004	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/6/18	1337	Morg Killion	Christ Waite	12/6/18	1337
12/6/18	1821	Christ Waite	[signature]	12/07/18	0400

Remarks: MorganKillion@Yahoo.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.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Harvest Four Corners, LLC	OGRID	37388
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # *(assigned by OCD)*	NCS1828937011
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.674729 Longitude -107.870416
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Trunk J	Site Type Pipeline
Date Release Discovered 8/24/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	11	28N	10W	San Juan

NMOCD
DEC 03 2018
DISTRICT III

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) 23 BBLs	Volume Recovered (bbls) 55 Yards of impacted soil removed
	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

Pipeline failure due to corrosion.

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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? **Unauthorized release exceeding 25 bbls of liquid that may with reasonable probability to reach a watercourse.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Matt Webre (Williams) notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 8/24/2018 @ 3:47pm.**	

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	66 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 11/21/2018

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 11/21/2018

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

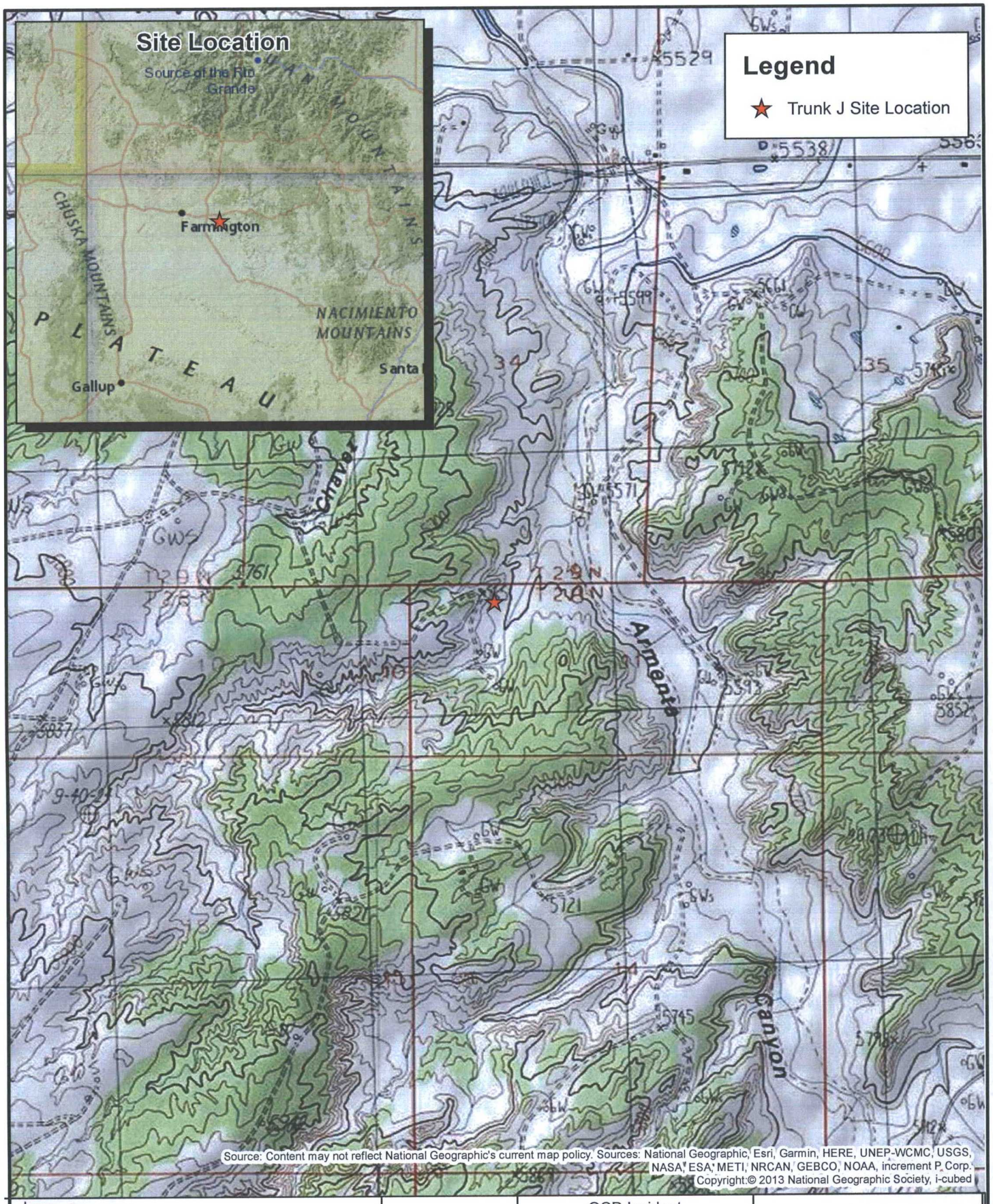
OCD Only

Received by: Vanessa Fields Date: 12/3/2018

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: 1/8/2019

Printed Name: Vanessa Fields Title: Environmental Specialist



Document Path: Z:\Hillcorp\Trunk J\Trunk J Topographic Location Map.mxd

Rule Engineering, LLC
Solutions to Regulations for Industry

0 1,050 2,100 4,200 Feet

Blanco Quadrangle
1:24,000

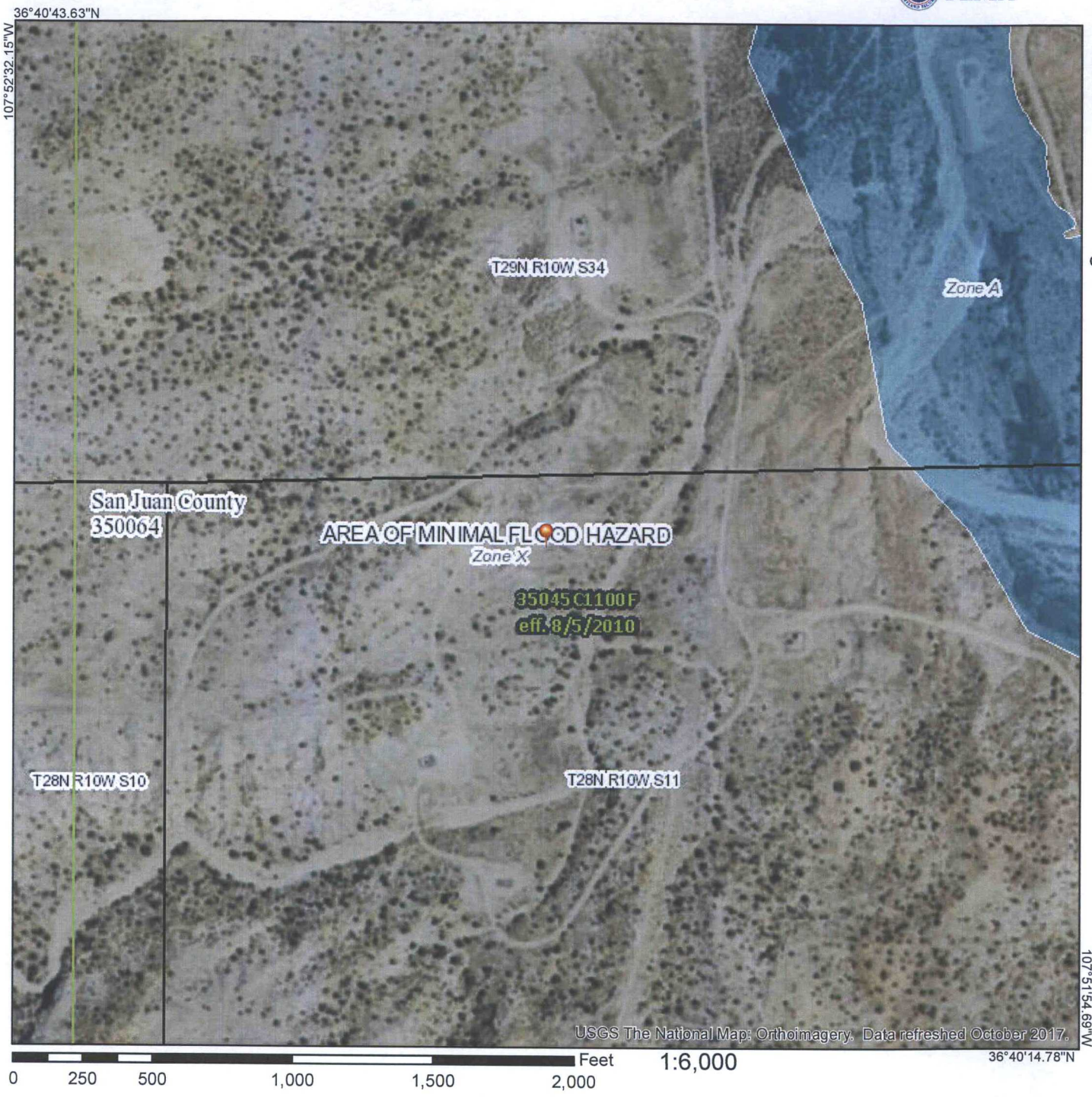
HARVEST MIDSTREAM

OCD Incident
#NCS1828937011
L-S11-T28N-R10W
N36.67473, W107.87042
San Juan County, NM

Figure 2
Topographic Site Map
Trunk J

National Flood Hazard Layer FIRMette

FEMA



Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/20/2018 at 4:36:30 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

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

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 243486.82 **Northing (Y):** 4062629.43 **Radius:** 305

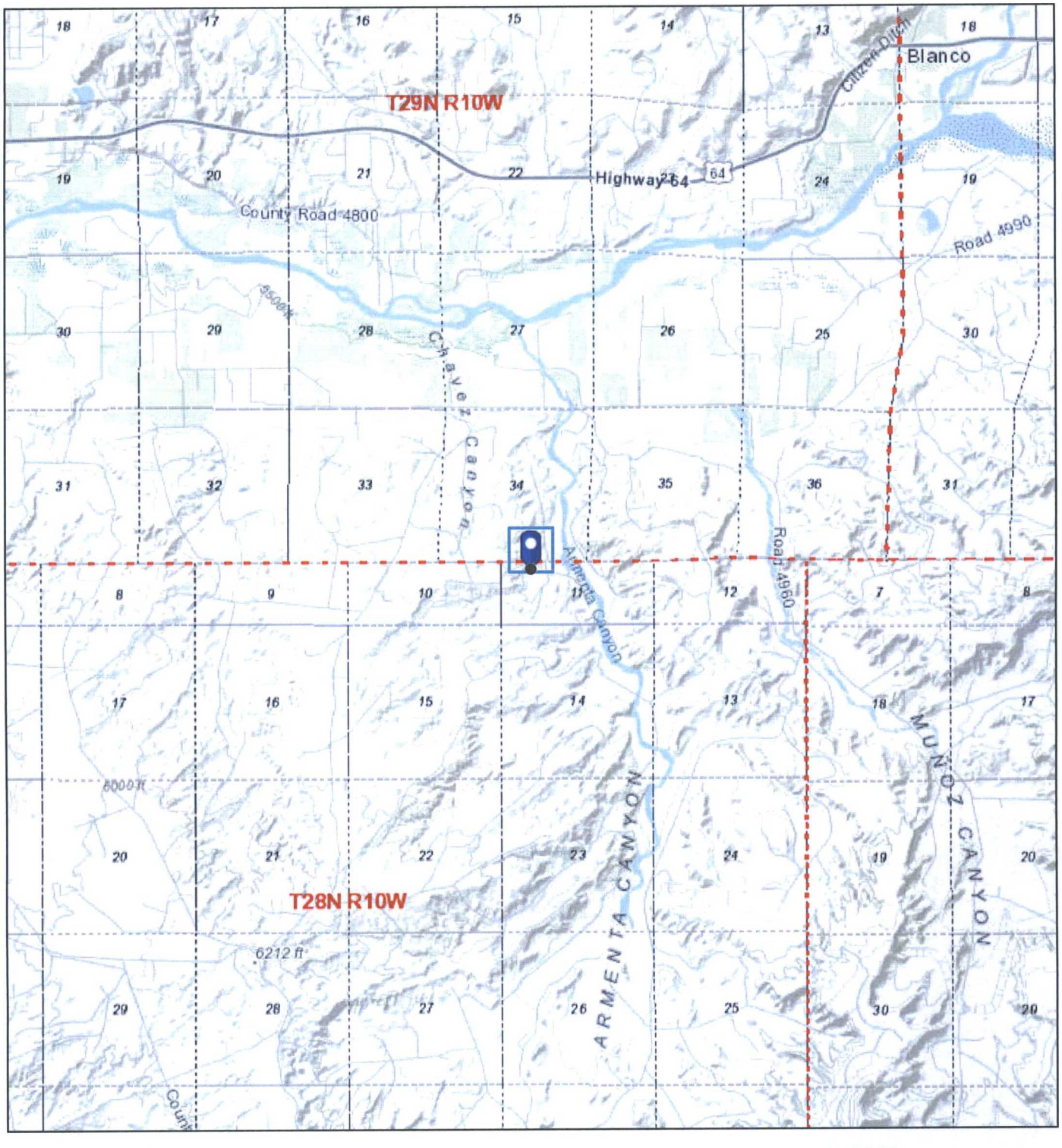
New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

UTMNAD83 Radius Search (in meters):

Easting (X): 243486.82 **Northing (Y):** 4062629.43 **Radius:** 805

Trunk J Mine Map



11/20/2018, 2:50:14 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

Bureau of Land Management Geographic Coordinate Database, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

Narrative of Remedial Activities

The Harvest Four Corners, LLC (Harvest) Trunk J pipeline release site is located at N36.67429, W107.87042 in Unit Letter L, Section 11, Township 28 North, Range 10 West, in San Juan County, New Mexico. The release resulted from corrosion of the pipeline discovered on August 24, 2018, and the release is estimated to have started on August 23, 2018, during performance of maintenance activities on another section of the same pipeline. The liquids traveled approximately 270 feet to a nearby dry wash.

On August 25, 2018, Harvest initiated remediation by dig and haul at the location. Approximately 15 cubic yards of soil were removed on August 25th, 20 cubic yards on August 27th, and 20 cubic yards on August 30th, resulting in a total of approximately 55 cubic yards of hydrocarbon impacted soils removed to an approved landfarm for remediation/disposal.

Notification for confirmation sampling was provided on August 29, 2018. On August 31, 2018, two five-point composite samples (*Floor* and *Side Walls*) were collected from the excavation and six five-point composite samples (*D-1, D-2, D-3, D-4, W-1*, and *W-2*) were collected from the flow path of the release for laboratory analysis. Upon arrival at the laboratory, the samples were discovered to be outside acceptable temperature ranges and rejected for analysis. Notification of the error was provided and confirmation samples were re-collected from the original locations on September 4, 2018.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for chloride per USEPA Method 300.0, BTEX per USEPA Method 8260B and TPH per USEPA 8015M/D.

Laboratory analytical results for chloride, total BTEX, benzene, and total TPH are below the remediation standards. No qualifier flags were indicated for the laboratory results.

The excavation was backfilled with clean, imported soil on September 10, 2018.

Photograph Log
Trunk J Pipeline Release
Harvest Four Corners, LLC

Photograph #1	
Client: Harvest Four Corners, LLC	
Site Name: Trunk J Pipeline Release	
Date Photo Taken: September 10, 2018	
Release Location: N36.67429, W107.87042 L-11-28N-10W San Juan County, NM	Description: Facing northeast, view of remedial excavation and pipeline.

Remediation Excavation and Sampling Form

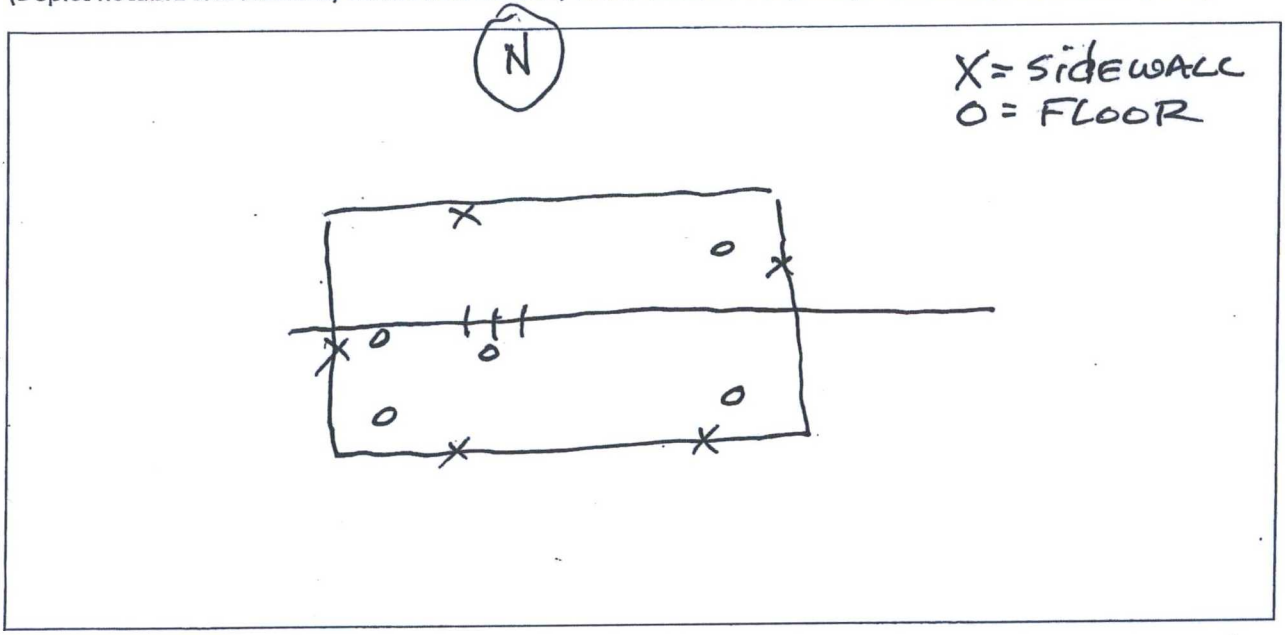
Site Name TRK J

Excavation Dimensions (feet)

17½' Length 11' Width 10' 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) _____

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
TRKJ Floor	8/31/18	Composite	FLOOR	
TRKJ side	8/31/18	Composite	SIDEWALL	

Remediation Excavation and Sampling Form

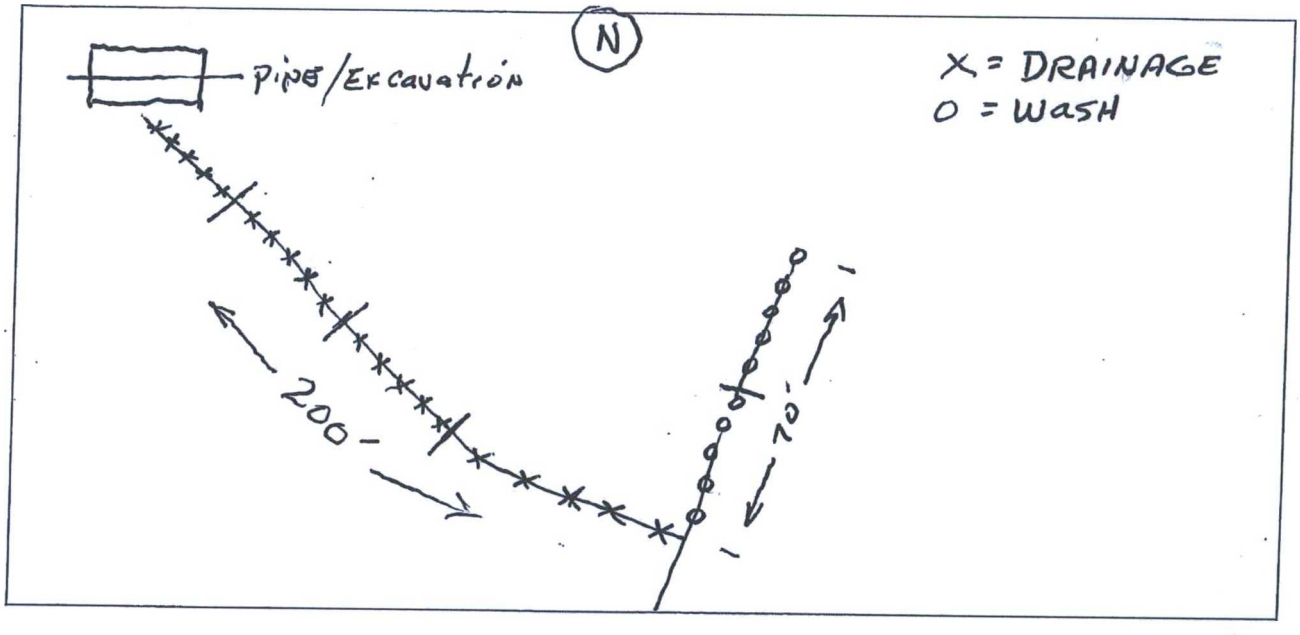
Site Name TRK J DRAINAGE/WASH 8/31/18

Excavation Dimensions (feet)

_____ Length _____ Width _____ Depth

Excavation Diagram and Sample Locations

(Depict notable site features, excavation extents, visual observations, sample locations, north arrow, etc.)

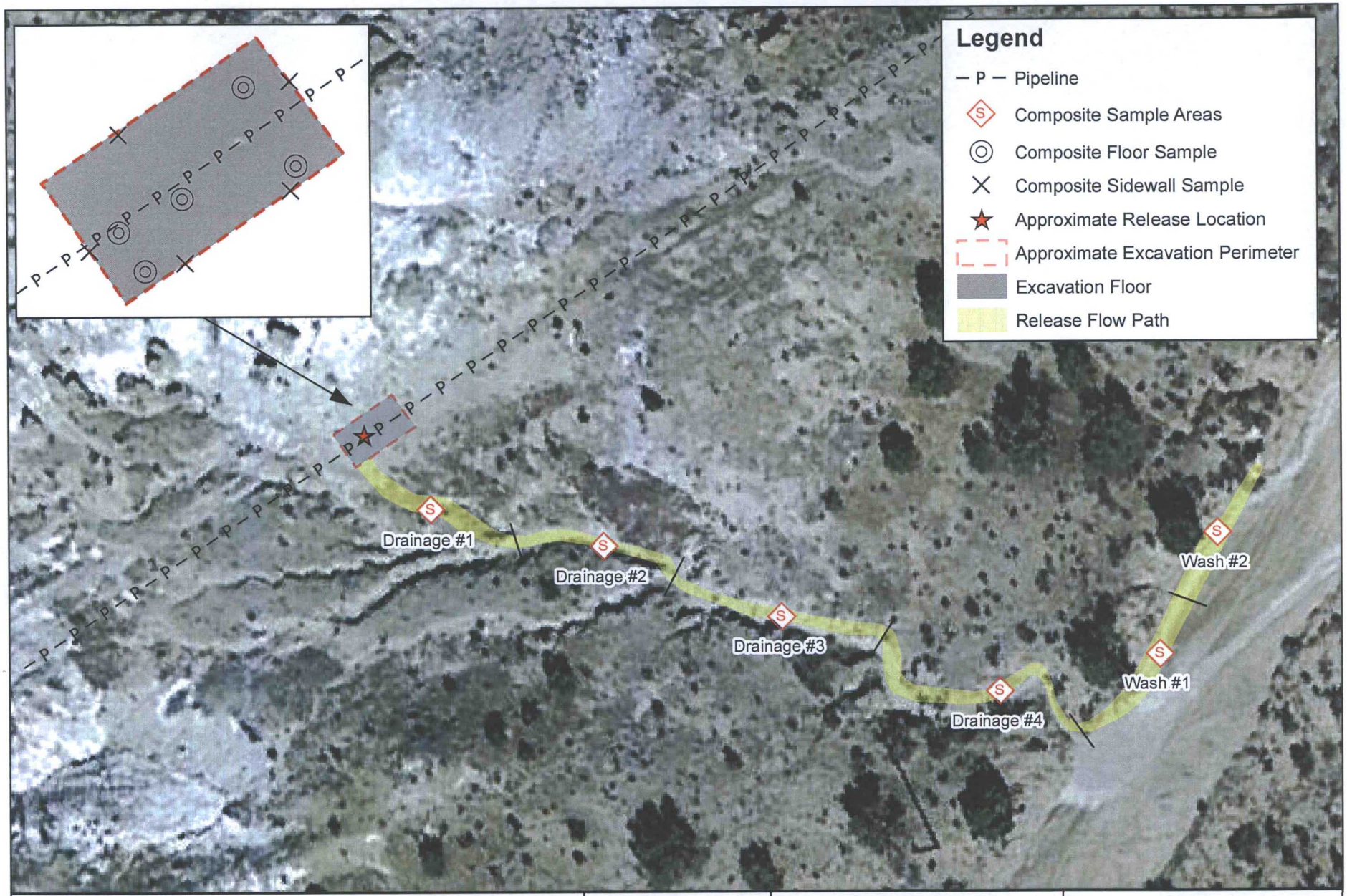


Sample Information

OCD Witness Sampling Yes or No

Agency(s) Representative(s) _____

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
DRAINAGE #1	8/31/18	Composite	DRAINAGE	
DRAINAGE #2	8/31/18	Composite	DRAINAGE	
DRAINAGE #3	8/31/18	Composite	DRAINAGE	
DRAINAGE #4	8/31/18	Composite	DRAINAGE	
WASH #1	8/31/18	Composite	WASH	
WASH #2	8/31/18	Composite	WASH	



Rule Engineering, LLC
Solutions to Regulations for Industry

0 12.5 25 50 75 100 Feet

1 in = 33 ft

N

HARVEST MIDSTREAM

OCD Incident # NCS1828937011
L-S11-T28N-R10W
N36.67429, W107.87042
San Juan County, NM

Figure 1
Site Map with Sample Locations
Trunk J

Date: 11/19/2018

Document Path: R:\27 GIS CAD\Hilcorp\Trunk J\Trunk J Aerial Site Map with Sample Locations.mxd

Table 1. Summary of Laboratory Analytical Results
Harvest Four Corners, LLC
Trunk J Pipeline Release
San Juan County, New Mexico

Sample Name	Date	Approximate Sample Depth (ft bgs)	Sample Location	Laboratory Analytical Results								
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Chloride (mg/kg)
Remediation Standard*				**10**	**NE**	**NE**	**NE**	**50**	**100**			**600**
Floor	9/4/2018	10	Excavation Base	0.035	0.23	0.037	0.45	0.75	5.4	<9.3	<47	37
Side Walls	9/4/2018	0 - 10	Excavation Sidewalls	<0.017	0.21	0.055	0.80	1.07	8.9	<10	<50	48
D-1	9/4/2018	Various	Drainage #1	<0.018	<0.037	<0.037	<0.074	ND	<3.7	20	67	<30
D-2	9/4/2018	Various	Drainage #2	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<9.8	<49	<30
D-3	9/4/2018	Various	Drainage #3	<0.021	<0.041	<0.041	<0.082	ND	<4.1	<9.4	<47	<30
D-4	9/4/2018	Various	Drainage #4	<0.015	<0.031	<0.031	<0.062	ND	<3.1	<10	<51	<30
W-1	9/4/2018	Various	Wash #1	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<10	<50	<30
W-2	9/4/2018	Various	Wash #2	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<9.8	<49	<30

Notes:
ft bgs - feet below grade surface
mg/kg - milligrams per kilogram
NE - not established
ND - not detected above laboratory reporting limits
TPH - total petroleum hydrocarbons
GRO - gasoline range organics
DRO - diesel range organics
MRO - mineral oil range organics
*Per Table 1 of 19.15.29.12 NMAC, based on category *"less than or equal to 50 feet"* to groundwater

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

September 10, 2018

Kijun Hong
Williams Field Services
188 Co. Rd 4900
Bloomfield, NM 87413
TEL:
FAX

RE: Trunk J Line Leak

OrderNo.: 1809076

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/5/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-001 **Matrix:** SOIL

Client Sample ID: Floor
Collection Date: 9/4/2018 12:30:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	37	30		mg/Kg	20	9/5/2018 11:19:31 PM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	5.4	3.7		mg/Kg	1	9/5/2018 3:11:57 PM	G53926
Surr: BFB	102	70-130		%Rec	1	9/5/2018 3:11:57 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/6/2018 10:43:38 AM	40150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 10:43:38 AM	40150
Surr: DNOP	86.7	50.6-138		%Rec	1	9/6/2018 10:43:38 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	0.035	0.018		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Toluene	0.23	0.037		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Ethylbenzene	0.037	0.037		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Xylenes, Total	0.45	0.074		mg/Kg	1	9/5/2018 3:11:57 PM	R53926
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	9/5/2018 3:11:57 PM	R53926
Surr: Toluene-d8	93.6	70-130		%Rec	1	9/5/2018 3:11:57 PM	R53926

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.

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-002 **Matrix:** SOIL

Client Sample ID: Side Walls
Collection Date: 9/4/2018 12:35:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	48	30		mg/Kg	20	9/5/2018 11:56:44 PM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	8.9	3.4		mg/Kg	1	9/5/2018 7:49:41 PM	G53926
Surr: BFB	104	70-130		%Rec	1	9/5/2018 7:49:41 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2018 11:07:56 AM	40150
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2018 11:07:56 AM	40150
Surr: DNOP	92.5	50.6-138		%Rec	1	9/6/2018 11:07:56 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.017		mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Toluene	0.21	0.034		mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Ethylbenzene	0.055	0.034		mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Xylenes, Total	0.80	0.067		mg/Kg	1	9/5/2018 7:49:41 PM	R53926
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	9/5/2018 7:49:41 PM	R53926
Surr: Toluene-d8	96.6	70-130		%Rec	1	9/5/2018 7:49:41 PM	R53926

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

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-003 **Matrix:** SOIL

Client Sample ID: D-1
Collection Date: 9/4/2018 12:40:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 12:09:09 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	9/5/2018 3:35:06 PM	G53926
Surr: BFB	103	70-130		%Rec	1	9/5/2018 3:35:06 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	20	9.4		mg/Kg	1	9/6/2018 11:32:21 AM	40150
Motor Oil Range Organics (MRO)	67	47		mg/Kg	1	9/6/2018 11:32:21 AM	40150
Surr: DNOP	96.7	50.6-138		%Rec	1	9/6/2018 11:32:21 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Toluene	ND	0.037		mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Ethylbenzene	ND	0.037		mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Xylenes, Total	ND	0.074		mg/Kg	1	9/5/2018 3:35:06 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	9/5/2018 3:35:06 PM	R53926
Surr: Toluene-d8	97.6	70-130		%Rec	1	9/5/2018 3:35:06 PM	R53926

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

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-004 **Matrix:** SOIL

Client Sample ID: D-2
Collection Date: 9/4/2018 12:45:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 9:16:28 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/5/2018 3:58:12 PM	G53926
Surr: BFB	105	70-130		%Rec	1	9/5/2018 3:58:12 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2018 11:56:39 AM	40150
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2018 11:56:39 AM	40150
Surr: DNOP	93.9	50.6-138		%Rec	1	9/6/2018 11:56:39 AM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Toluene	ND	0.035		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Ethylbenzene	ND	0.035		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Xylenes, Total	ND	0.071		mg/Kg	1	9/5/2018 3:58:12 PM	R53926
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	9/5/2018 3:58:12 PM	R53926
Surr: Toluene-d8	92.2	70-130		%Rec	1	9/5/2018 3:58:12 PM	R53926

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: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-005 **Matrix:** SOIL

Client Sample ID: D-3
Collection Date: 9/4/2018 12:50:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 9:28:52 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/5/2018 4:21:27 PM	G53926
Surr: BFB	103	70-130		%Rec	1	9/5/2018 4:21:27 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/6/2018 12:21:07 PM	40150
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/6/2018 12:21:07 PM	40150
Surr: DNOP	96.6	50.6-138		%Rec	1	9/6/2018 12:21:07 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.021		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Toluene	ND	0.041		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Ethylbenzene	ND	0.041		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Xylenes, Total	ND	0.082		mg/Kg	1	9/5/2018 4:21:27 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	9/5/2018 4:21:27 PM	R53926
Surr: Toluene-d8	95.5	70-130		%Rec	1	9/5/2018 4:21:27 PM	R53926

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.

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-006 **Matrix:** SOIL

Client Sample ID: D-4
Collection Date: 9/4/2018 12:55:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 9:41:16 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	9/5/2018 4:44:37 PM	G53926
Surr: BFB	106	70-130		%Rec	1	9/5/2018 4:44:37 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2018 12:45:28 PM	40150
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	9/6/2018 12:45:28 PM	40150
Surr: DNOP	95.5	50.6-138		%Rec	1	9/6/2018 12:45:28 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.015		mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Toluene	ND	0.031		mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Ethylbenzene	ND	0.031		mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Xylenes, Total	ND	0.062		mg/Kg	1	9/5/2018 4:44:37 PM	R53926
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	9/5/2018 4:44:37 PM	R53926
Surr: Toluene-d8	94.8	70-130		%Rec	1	9/5/2018 4:44:37 PM	R53926

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: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-007 **Matrix:** SOIL

Client Sample ID: W-1
Collection Date: 9/4/2018 1:00:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 9:53:40 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	9/5/2018 5:07:53 PM	G53926
Surr: BFB	98.6	70-130		%Rec	1	9/5/2018 5:07:53 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/6/2018 1:09:59 PM	40150
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/6/2018 1:09:59 PM	40150
Surr: DNOP	97.9	50.6-138		%Rec	1	9/6/2018 1:09:59 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Toluene	ND	0.035		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Ethylbenzene	ND	0.035		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Xylenes, Total	ND	0.071		mg/Kg	1	9/5/2018 5:07:53 PM	R53926
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	9/5/2018 5:07:53 PM	R53926
Surr: Toluene-d8	93.6	70-130		%Rec	1	9/5/2018 5:07:53 PM	R53926

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.

Analytical Report
Lab Order **1809076**
Date Reported: **9/10/2018**

CLIENT: Williams Field Services
Project: Trunk J Line Leak
Lab ID: 1809076-008 **Matrix:** SOIL

Client Sample ID: W-2
Collection Date: 9/4/2018 1:05:00 PM
Received Date: 9/5/2018 7:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	9/6/2018 10:06:04 AM	40171
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	9/5/2018 5:31:01 PM	G53926
Surr: BFB	103	70-130		%Rec	1	9/5/2018 5:31:01 PM	G53926
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/6/2018 1:34:21 PM	40150
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/6/2018 1:34:21 PM	40150
Surr: DNOP	93.3	50.6-138		%Rec	1	9/6/2018 1:34:21 PM	40150
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.017		mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Toluene	ND	0.034		mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Ethylbenzene	ND	0.034		mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Xylenes, Total	ND	0.068		mg/Kg	1	9/5/2018 5:31:01 PM	R53926
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	9/5/2018 5:31:01 PM	R53926
Surr: Toluene-d8	97.3	70-130		%Rec	1	9/5/2018 5:31:01 PM	R53926

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#: **1809076**

10-Sep-18

Client: Williams Field Services

Project: Trunk J Line Leak

Sample ID **MB-40171**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **40171**	RunNo: **53927**							
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781259**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-40171**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **40171**	RunNo: **53927**							
Prep Date: **9/5/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781260**	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1809076**

10-Sep-18

Client: Williams Field Services

Project: Trunk J Line Leak

Sample ID **MB-40150**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40150**	RunNo: **53951**
Prep Date: **9/5/2018**	Analysis Date: **9/6/2018**	SeqNo: **1781019** 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	9.0		10.00		89.6	50.6	138			

Sample ID **LCS-40150**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40150**	RunNo: **53951**
Prep Date: **9/5/2018**	Analysis Date: **9/6/2018**	SeqNo: **1781020** 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	84.6	70	130			
Surr: DNOP	4.4		5.000		87.8	50.6	138			

Sample ID **LCS-40196**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40196**	RunNo: **53951**
Prep Date: **9/6/2018**	Analysis Date: **9/7/2018**	SeqNo: **1784387** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.1	50.6	138			

Sample ID **MB-40196**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40196**	RunNo: **53951**
Prep Date: **9/6/2018**	Analysis Date: **9/7/2018**	SeqNo: **1784388** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		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#: **1809076**

10-Sep-18

Client: Williams Field Services

Project: Trunk J Line Leak

Sample ID **100ng lcs**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **R53926**	RunNo: **53926**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1781316** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.51		0.5000		102	70	130			

Sample ID **lcs-40132**	SampType: **LCS4**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **BatchQC**	Batch ID: **40132**	RunNo: **53926**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781359** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.55		0.5000		111	70	130			
Surr: Toluene-d8	0.47		0.5000		94.4	70	130			

Sample ID **mb-40132**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **40132**	RunNo: **53926**
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**	SeqNo: **1781360** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.60		0.5000		120	70	130			
Surr: Toluene-d8	0.48		0.5000		96.9	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **R53926**	RunNo: **53926**
Prep Date:	Analysis Date: **9/5/2018**	SeqNo: **1781361** 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	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.50		0.5000		99.7	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#: **1809076**

10-Sep-18

Client: Williams Field Services

Project: Trunk J Line Leak

Sample ID **lcs-40132**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **LCSS**	Batch ID: **40132**			RunNo: **53926**					
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**			SeqNo: **1781407**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	510		500.0		103	70	130			

Sample ID **mb-40132**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **PBS**	Batch ID: **40132**			RunNo: **53926**					
Prep Date: **9/4/2018**	Analysis Date: **9/5/2018**			SeqNo: **1781408**		Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	530		500.0		107	70	130			

Sample ID **rb**	SampType: **MBLK**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **PBS**	Batch ID: **G53926**			RunNo: **53926**					
Prep Date:	Analysis Date: **9/5/2018**			SeqNo: **1781409**		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	470		500.0		93.3	70	130			

Sample ID **2.5ug gro lcs**	SampType: **LCS**			TestCode: **EPA Method 8015D Mod: Gasoline Range**					
Client ID: **LCSS**	Batch ID: **G53926**			RunNo: **53926**					
Prep Date:	Analysis Date: **9/5/2018**			SeqNo: **1781674**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.2	70	130			
Surr: BFB	470		500.0		93.1	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: WILLIAMS FIELD SERVI Work Order Number: 1809076 RcptNo: 1

Received By: Anne Thorne 9/5/2018 7:00:00 AM Anne Thorne

Completed By: Anne Thorne 9/5/2018 9:14:24 AM Anne Thorne

Reviewed By: JO 09/05/18

Labeled by: AT 09/05/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (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
3	1.3	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 1755 Arroyo DR.
Bloomfield NM 87413

Phone #: 505-632-4475

email or Fax#: Kijun.Hong@Williams.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 9-6-18
☐ Standard ☑ Rush 2-day

Project Name: TRUNK J LINE LEAK

Project #:

Project Manager: Kijun Hong

Sampler: MK

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3 CF-to=1.3

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 # (9/05/18 A, 3 coolers, MeOH/4oz)	Preservative Type	HEAL No. 1809016	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
9/4/18	1230	soil	Floor	1-4oz	Cool	201	X		X									X				
9/4/18	1235	soil	Sidewalls	1-4oz		202	X		X									X				
9/4/18	1240	soil	D-1	1-4oz		203	X		X									X				
9/4/18	1245	soil	D-2	1-4oz		204	X		X									X				
9/4/18	1250	soil	D-3	1-4oz		205	X		X									X				
9/4/18	1255	soil	D-4	1-4oz		206	X		X									X				
9/4/18	1300	soil	W-1	1-4oz		207	X		X									X				
9/4/18	1305	soil	W-2	1-4oz		208	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/4/18	1458	[signature]	[signature]	9/4/18	1458
9/4/18	1917	[signature]	[signature]	09/05/18 @7CC	

Remarks:
D - Drainage
W - Wash

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.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Harvest Four Corners, LLC	OGRID	37388
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # *(assigned by OCD)*	NVF1829149123
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.926192 Longitude -108.143259
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral A-15	Site Type Pipeline
Date Release Discovered 9/30/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
L	6	31N	12W	San Juan

NMOCD
JAN 03 2019
DISTRICT III

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) 470 yards removed	Volume Recovered (bbls) 470 yards removed
	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) 24	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

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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? **Unauthorized release expected to exceed 25 bbls of liquid including historical impacts.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Kijun Hong notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 10/1/2018 @ 12:09pm.**	

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: 10/15/2018

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	~61 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 12/27/2018

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

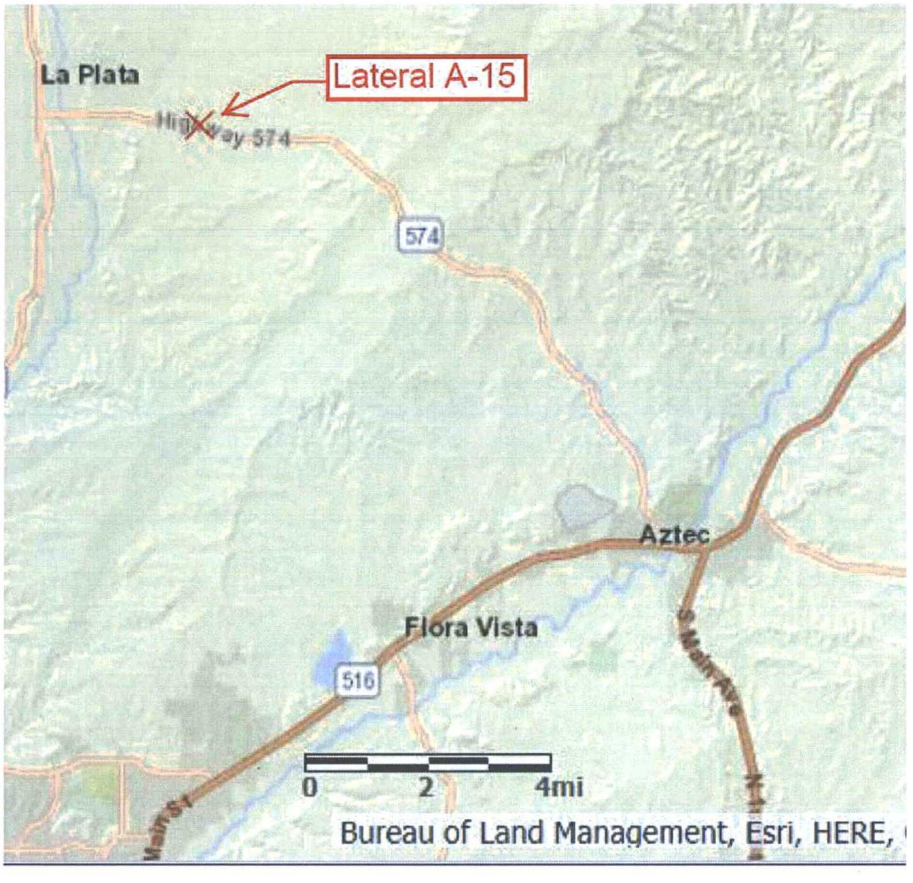
OCD Only

Received by: Date:

Harvest Midstream: Lateral A-15
GPS Coordinates: 36.926192, -108.143259
Legal Description: Unit L, Section 6, T31N, R12W; San Juan County
Incident #: NVF1829149123, 9/30/2018

Characterization Report

Lateral A-15 Line Leak Location



Depth to Water Determination

The nearest depth to water data was located 2,238 meters northwest, at an altitude of 5,812 feet and depth to ground water of 32 feet. Given that the release location is at an elevation of 5,841 feet, it is assumed that depth to ground water at the release location is approximately 61 feet.

Depth To Groundwater

POD Number	Well Depth (ft)	Depth to Water (ft)	Water Bearing Stratifications (ft)	Description	Distance / Direction from Lateral A-15		Site Elevation (ft)
SJ 00835	34	19	32-34	Sandstone/Gravel/ Conglomerate	2238 mtrs	1.39 mi NW	5812

Source: http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 00835		SJLP	SJ		2	2	02	31N	13W	218002	4092270*	2238	34	19	15
SJ 02590		SJLP	SJ	3	2	1	02	31N	13W	217099	4092201*	3056	114	70	44

Average Depth to Water: **44 feet**

Minimum Depth: **19 feet**

Maximum Depth: **70 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 220021.83 **Northing (Y):** 4091305.44 **Radius:** 3200

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

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/12/18 9:45 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	SJ 00835	2	2		02	31N	13W	218002	4092270*

Driller License: 666 **Driller Company:** GILBERT, JOHN G.

Driller Name: GILBERT, JOHN G.

Drill Start Date: 11/20/1978 **Drill Finish Date:** 11/29/1978 **Plug Date:**

Log File Date: 12/08/1978 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 10 GPM

Casing Size: 6.00 **Depth Well:** 34 feet **Depth Water:** 19 feet

Water Bearing Stratifications:	Top	Bottom	Description
	32	34	Sandstone/Gravel/Conglomerate

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

Determination of water sources and significant watercourses within ½-mile of release

The closest significant watercourse to the site is the ephemeral stream located approximately 55 meters south-southeast of the site and marked by a dashed blue line on the imagery included below.

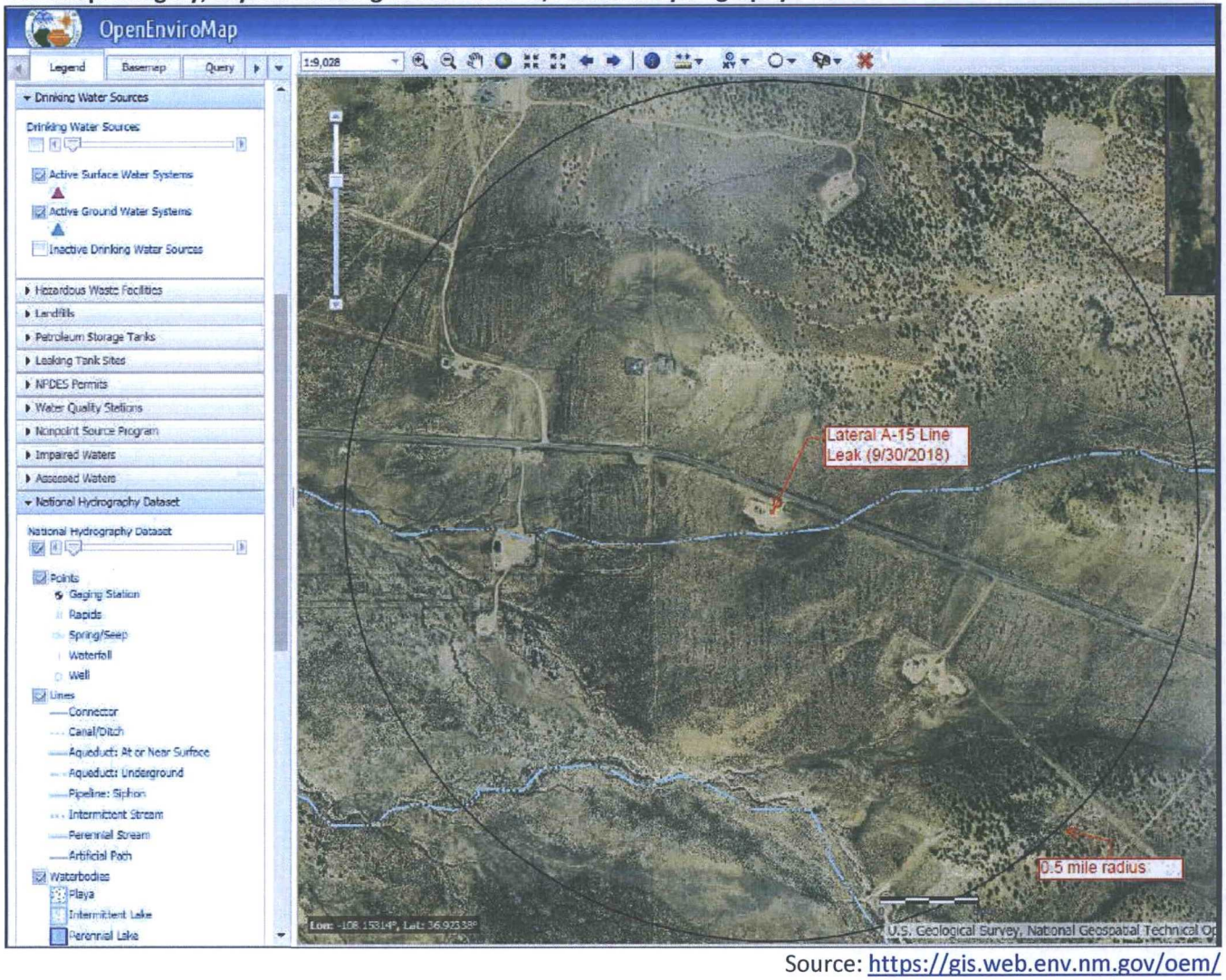
Water Sources within ½-mile

Lateral A-15 site elevation: 5841 feet

Location Name	Distance/Direction from Lateral A-15		Elevation (ft)
Ephemeral Stream 1	55 meters	S-SE	5835-5845
Ephemeral Stream 2	518 meters	S	5819

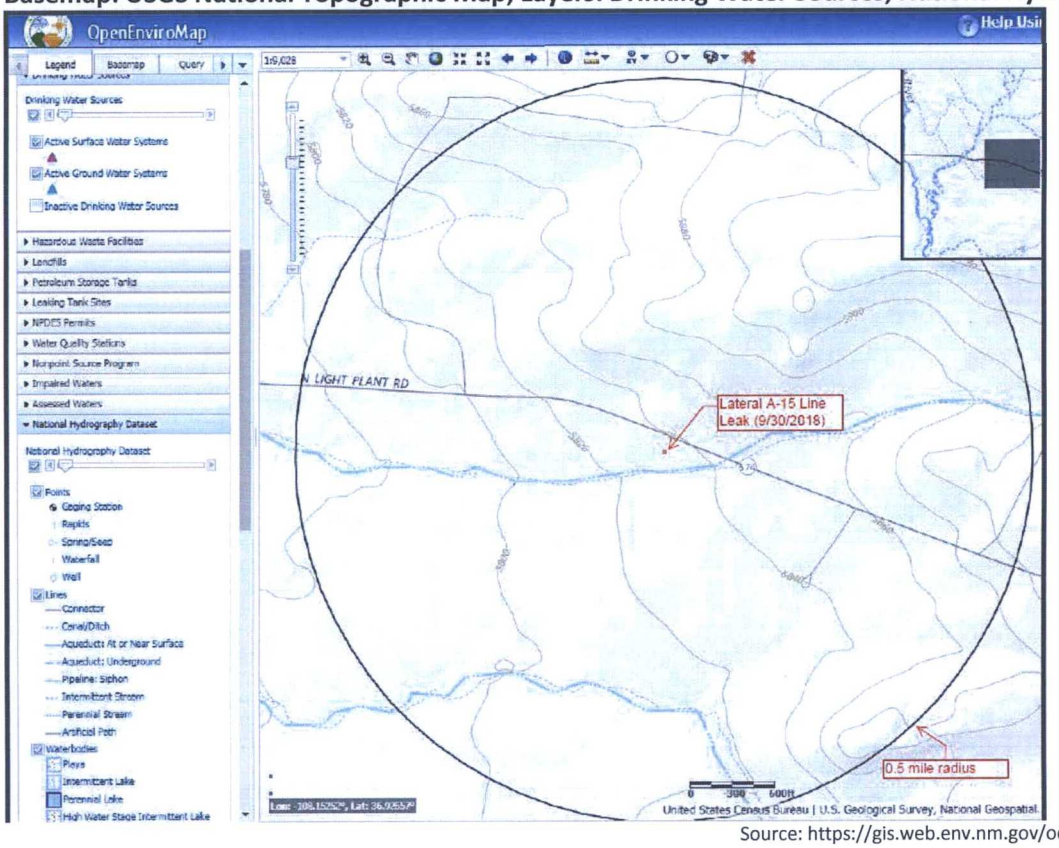
Source: https://gis.web.env.nm.gov/oem/

Location of Lateral A-15 Line Leak relative to Ephemeral Streams.
Basemap: Imagery; Layers: Drinking Water Sources, National Hydrography Dataset



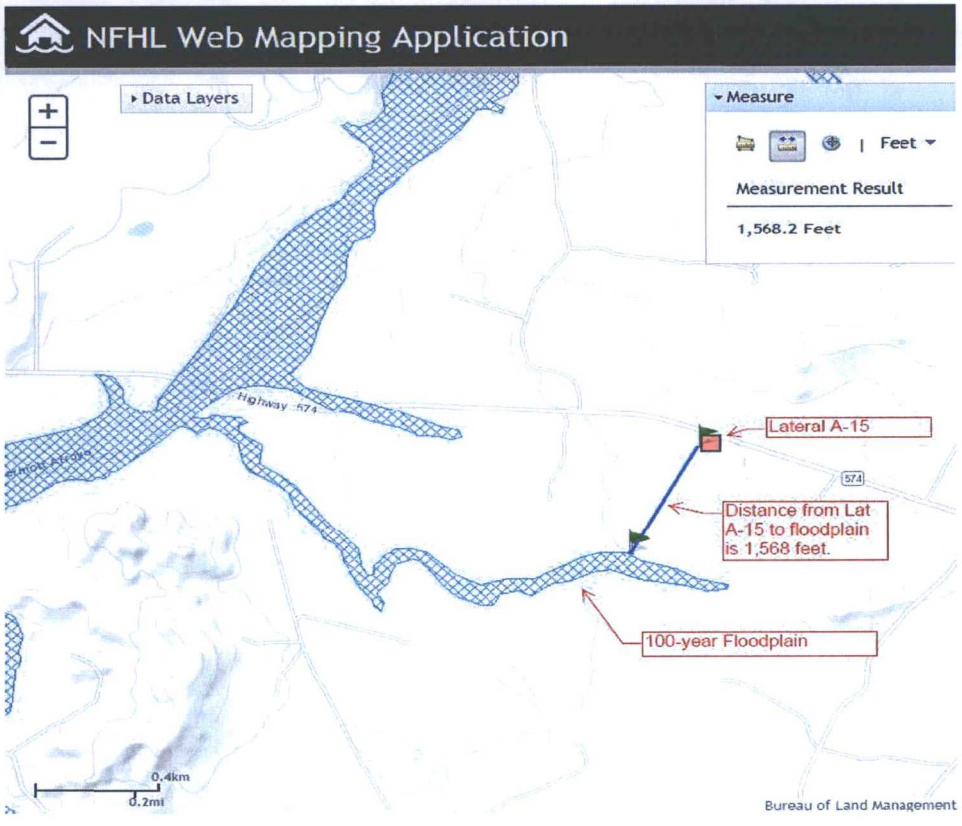
Source: https://gis.web.env.nm.gov/oem/

Location of Lateral A-15 Line Leak relative to Ephemeral Streams.
Basemap: USGS National Topographic Map; Layers: Drinking Water Sources, National Hydrography Dataset



Source: https://gis.web.env.nm.gov/oem/

Distance to Floodplain



State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 12/27/2018

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

OCD Only

Received by: Vanessa Fields Date: 1/3/2019

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: 1/9/2019

Printed Name: Vanessa Fields Title: Environmental Specalist

Harvest Midstream: Lateral A-15
GPS Coordinates: 36.926192, -108.143259
Legal Description: Unit L, Section 6, T31N, R12W; San Juan County
Incident #: NVF1829149123

Closure Report

On September 30, 2018, a pipeline failure on the Lateral A-15 caused the release of more than 25 barrels of produced water to the ground. An area approximately 70 feet long, 44 feet wide and 14 to 18 feet deep was excavated to ensure removal of affected soil. The nearest significant watercourse to the site is an ephemeral stream located about 180 feet south of the release location. Since the nearest significant watercourse is located less than 300 feet from the release location, closure criteria for a release less than 50 feet to ground water (per Table I of 19.15.29.12 NMAC) were applied. The excavation notes and analytical results are included in this report. A total of 470 yards of impacted soil and over-excavated soil were hauled from the site for proper disposal. The area was backfilled with clean fill material and the ground surface was restored to its original grade.

Excavation Notes and Field Data

Remediation Excavation and Sampling Form

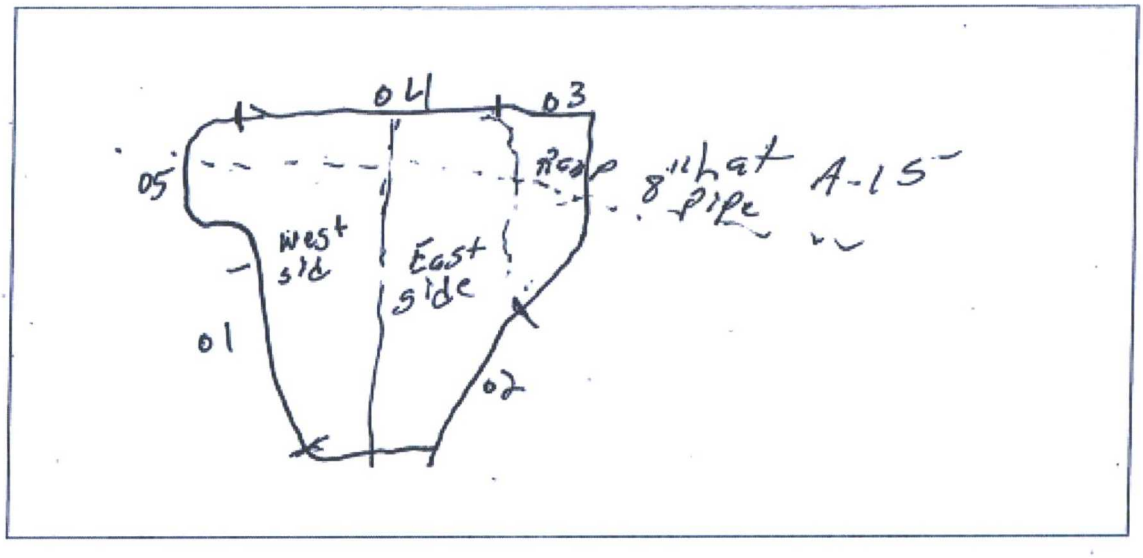
Site Name Lat A-15

Excavation Dimensions (feet)

70' Length 44' Width 14' to 18' 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) Corey Smith

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
01	10-3-18	Composite	sidewalls	
02	10-3-18	Composite	side walls	
03	10-3-18	Composite	side walls	
04	10-3-18	Composite	side walls	
05	10-3-18	Composite	side walls	
Westside	10-3-18	Composite	Floor	
Eastside	10-3-18	Composite	Floor	

Data table of Soil Contaminant Concentration

(Full lab report included as Attachment)

Harvest Midstream Lateral A-15 Line Leak Date Discovered 9/30/2018									Sample Date: 10/3/2018	
EPA Method	Analyses	DTGW<=50 ft Closure Criteria (mg/kg)		SOIL SAMPLE ID						
				01 Sidewalls	02 Sidewalls	03 Sidewalls	04 Sidewalls	05 Sidewalls	West Bottom	East Bottom
300	Chloride	N/A	600	ND	ND	79	80	120	210	180
8015M/D	DRO	N/A	100	ND	ND	ND	ND	ND	ND	ND
	MRO	N/A		ND	ND	ND	ND	ND	ND	ND
8015D	GRO	N/A		ND	ND	ND	ND	ND	ND	ND
8021B	Benzene	10	50	ND	ND	ND	ND	ND	ND	ND
	Toluene	N/A		ND	ND	ND	ND	ND	ND	ND
	Ethylbenzene	N/A		ND	ND	ND	ND	ND	ND	ND
	Xylenes, total	N/A		ND	ND	ND	ND	ND	ND	ND

Excavation Photograph

ATTACHMENT

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

October 05, 2018

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

RE: Lateral A-15 Line Leak

OrderNo.: 1810254

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/4/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1810254**
Date Reported: **10/5/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Lateral A-15 Line Leak
Lab ID: 1810254-001 **Matrix:** SOIL

Client Sample ID: 01 Sidewalls
Collection Date: 10/3/2018 11:00:00 AM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/4/2018 10:46:49 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 10:17:32 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 10:17:32 AM	40800
Surr: DNOP	116	50.6-138		%Rec	1	10/4/2018 10:17:32 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/4/2018 9:41:31 AM	G54639
Surr: BFB	88.8	15-316		%Rec	1	10/4/2018 9:41:31 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Toluene	ND	0.036		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Ethylbenzene	ND	0.036		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Xylenes, Total	ND	0.071		mg/Kg	1	10/4/2018 9:41:31 AM	B54639
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/4/2018 9:41:31 AM	B54639

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: 02 Sidewalls
Project: Lateral A-15 Line Leak
Collection Date: 10/3/2018 11:10:00 AM
Lab ID: 1810254-002 **Matrix:** SOIL
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/4/2018 10:59:13 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/4/2018 10:39:38 AM	40800
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/4/2018 10:39:38 AM	40800
Surr: DNOP	117	50.6-138		%Rec	1	10/4/2018 10:39:38 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/4/2018 10:04:10 AM	G54639
Surr: BFB	86.0	15-316		%Rec	1	10/4/2018 10:04:10 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Toluene	ND	0.038		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Ethylbenzene	ND	0.038		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Xylenes, Total	ND	0.075		mg/Kg	1	10/4/2018 10:04:10 AM	B54639
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/4/2018 10:04:10 AM	B54639

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: Lateral A-15 Line Leak
Lab ID: 1810254-003 **Matrix:** SOIL

Client Sample ID: 03 Sidewalls
Collection Date: 10/3/2018 11:20:00 AM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	79	30		mg/Kg	20	10/4/2018 11:11:37 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/4/2018 11:01:36 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 11:01:36 AM	40800
Surr: DNOP	114	50.6-138		%Rec	1	10/4/2018 11:01:36 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	10/4/2018 10:26:47 AM	G54639
Surr: BFB	85.6	15-316		%Rec	1	10/4/2018 10:26:47 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	10/4/2018 10:26:47 AM	B54639
Toluene	ND	0.038		mg/Kg	1	10/4/2018 10:26:47 AM	B54639
Ethylbenzene	ND	0.038		mg/Kg	1	10/4/2018 10:26:47 AM	B54639
Xylenes, Total	ND	0.076		mg/Kg	1	10/4/2018 10:26:47 AM	B54639
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/4/2018 10:26:47 AM	B54639

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.

Analytical Report
Lab Order **1810254**
Date Reported: **10/5/2018**

CLIENT: Harvest
Project: Lateral A-15 Line Leak
Lab ID: 1810254-004 **Matrix:** SOIL

Client Sample ID: 04 Sidewalls
Collection Date: 10/3/2018 11:30:00 AM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	80	30		mg/Kg	20	10/4/2018 11:24:02 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 11:23:49 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 11:23:49 AM	40800
Surr: DNOP	120	50.6-138		%Rec	1	10/4/2018 11:23:49 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	10/4/2018 10:49:24 AM	G54639
Surr: BFB	85.6	15-316		%Rec	1	10/4/2018 10:49:24 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Toluene	ND	0.041		mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Ethylbenzene	ND	0.041		mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Xylenes, Total	ND	0.081		mg/Kg	1	10/4/2018 10:49:24 AM	B54639
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/4/2018 10:49:24 AM	B54639

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: Lateral A-15 Line Leak
Lab ID: 1810254-005 **Matrix:** SOIL

Client Sample ID: 05 Sidewalls
Collection Date: 10/3/2018 11:40:00 AM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	120	30		mg/Kg	20	10/4/2018 11:36:27 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 11:45:41 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 11:45:41 AM	40800
Surr: DNOP	120	50.6-138		%Rec	1	10/4/2018 11:45:41 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	10/4/2018 11:12:05 AM	G54639
Surr: BFB	87.2	15-316		%Rec	1	10/4/2018 11:12:05 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Toluene	ND	0.044		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Ethylbenzene	ND	0.044		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Xylenes, Total	ND	0.087		mg/Kg	1	10/4/2018 11:12:05 AM	B54639
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/4/2018 11:12:05 AM	B54639

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: Lateral A-15 Line Leak
Lab ID: 1810254-006 **Matrix:** SOIL

Client Sample ID: West Bottom
Collection Date: 10/3/2018 11:50:00 AM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	210	30		mg/Kg	20	10/4/2018 11:48:52 AM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/4/2018 9:41:42 AM	40800
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/4/2018 9:41:42 AM	40800
Surr: DNOP	97.4	50.6-138		%Rec	1	10/4/2018 9:41:42 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	10/4/2018 11:34:52 AM	G54639
Surr: BFB	86.0	15-316		%Rec	1	10/4/2018 11:34:52 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Toluene	ND	0.040		mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Ethylbenzene	ND	0.040		mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Xylenes, Total	ND	0.081		mg/Kg	1	10/4/2018 11:34:52 AM	B54639
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	10/4/2018 11:34:52 AM	B54639

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: Lateral A-15 Line Leak
Lab ID: 1810254-007 **Matrix:** SOIL

Client Sample ID: East Bottom
Collection Date: 10/3/2018 12:00:00 PM
Received Date: 10/4/2018 6:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	180	30		mg/Kg	20	10/4/2018 12:01:16 PM	40802
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/4/2018 10:06:15 AM	40800
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/4/2018 10:06:15 AM	40800
Surr: DNOP	96.7	50.6-138		%Rec	1	10/4/2018 10:06:15 AM	40800
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	10/4/2018 11:57:34 AM	G54639
Surr: BFB	88.4	15-316		%Rec	1	10/4/2018 11:57:34 AM	G54639
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.017		mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Toluene	ND	0.033		mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Ethylbenzene	ND	0.033		mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Xylenes, Total	ND	0.067		mg/Kg	1	10/4/2018 11:57:34 AM	B54639
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/4/2018 11:57:34 AM	B54639

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#: **1810254**

05-Oct-18

Client: Harvest

Project: Lateral A-15 Line Leak

Sample ID	**MB-40802**	SampType: **mblk**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **40802**			RunNo: **54642**					
Prep Date:	**10/4/2018**	Analysis Date: **10/4/2018**			SeqNo: **1813615**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-40802**	SampType: **lcs**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **40802**			RunNo: **54642**					
Prep Date:	**10/4/2018**	Analysis Date: **10/4/2018**			SeqNo: **1813616**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1810254**

05-Oct-18

Client: Harvest

Project: Lateral A-15 Line Leak

Sample ID **LCS-40800**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40800**	RunNo: **54634**
Prep Date: **10/4/2018**	Analysis Date: **10/4/2018**	SeqNo: **1812298** 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	103	70	130			
Surr: DNOP	5.4		5.000		109	50.6	138			

Sample ID **MB-40800**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40800**	RunNo: **54634**
Prep Date: **10/4/2018**	Analysis Date: **10/4/2018**	SeqNo: **1812299** 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		108	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#: **1810254**

05-Oct-18

Client: Harvest

Project: Lateral A-15 Line Leak

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812839** 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	860		1000		86.2	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812840** 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	99.0	75.9	131			
Surr: BFB	1100		1000		107	15	316			

Sample ID **1810254-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **01 Sidewalls**	Batch ID: **G54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812841** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.6	17.87	0	98.0	77.8	128			
Surr: BFB	750		714.8		105	15	316			

Sample ID **1810254-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **01 Sidewalls**	Batch ID: **G54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812842** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.6	17.87	0	88.8	77.8	128	9.76	20	
Surr: BFB	740		714.8		104	15	316	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1810254**

05-Oct-18

Client: Harvest

Project: Lateral A-15 Line Leak

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812865** 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		102	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812866** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.0	77.3	128			
Toluene	1.0	0.050	1.000	0	103	79.2	125			
Ethylbenzene	0.99	0.050	1.000	0	98.8	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	98.6	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID **1810254-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **02 Sidewalls**	Batch ID: **B54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812867** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.019	0.7530	0.003818	105	68.5	133			
Toluene	0.82	0.038	0.7530	0.003230	108	75	130			
Ethylbenzene	0.79	0.038	0.7530	0	105	79.4	128			
Xylenes, Total	2.3	0.075	2.259	0	104	77.3	131			
Surr: 4-Bromofluorobenzene	0.79		0.7530		105	80	120			

Sample ID **1810254-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **02 Sidewalls**	Batch ID: **B54639**	RunNo: **54639**
Prep Date:	Analysis Date: **10/4/2018**	SeqNo: **1812868** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.74	0.019	0.7530	0.003818	97.9	68.5	133	7.10	20	
Toluene	0.77	0.038	0.7530	0.003230	102	75	130	6.25	20	
Ethylbenzene	0.73	0.038	0.7530	0	97.6	79.4	128	7.52	20	
Xylenes, Total	2.2	0.075	2.259	0	96.9	77.3	131	6.77	20	
Surr: 4-Bromofluorobenzene	0.80		0.7530		106	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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: WILLIAMS FIELD SERVI Work Order Number: 1810254 RcptNo: 1

Received By: Anne Thorne 10/4/2018 6:45:00 AM Anne Thorne

Completed By: Anne Thorne 10/4/2018 6:55:05 AM Anne Thorne

Reviewed By: JB 10/4/18

Labeled by: AT 10/04/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (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	1.3	Good	Yes			

Chain-of-Custody Record

Client: ~~WPX~~ Harvest

Mailing Address: 1755 ARROYO DR
Bloomfield NM 87413

Phone #: 505-632-4475

email or Fax#: Kijun.Hong@Williams.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☑ Rush Same day

Project Name:
Lateral A-15 Line Leak

Project #:

Project Manager:
Kijun Hong

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3-CF-0.1=2.3

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 Request ID	Container Type and # (At 10/04/18 Methanol)	Preservative Type	HEAL No. 1810254	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
10/3/18	1100	soil	01 Sidewalls	1-402	Cool	201	X		X									X				
10/3/18	1110	soil	02 Sidewalls	1-402		202	X		X									X				
10/3/18	1120	soil	03 Sidewalls	1-402		203	X		X									X				
10/3/18	1130	soil	04 Sidewalls	1-402		204	X		X									X				
10/3/18	1140	soil	05 Sidewalls	1-402		205	X		X									X				
10/3/18	1150	soil	West Bottom	1-402		206	X		X									X				
10/3/18	1200	soil	East Bottom	1-402		207	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/3/18	1640	Morg Killion	Christine Walker	10/3/18	1646
10/3/18	1817	Christine Walker		10/04/18	0645

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.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Harvest Four Corners, LLC	OGRID	37388
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	khong@harvestmidstream.com	Incident # *(assigned by OCD)*	NVF1829148087
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.60455 Longitude -107.84971
(NAD 83 in decimal degrees to 5 decimal places)

Site Name MN Galt	Site Type Pipeline
Date Release Discovered 10/4/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
E	1	27N	10W	San Juan

NMOCD
JAN 03 2019
DISTRICT III

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)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 4.32 MCF	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

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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? **Unauthorized natural gas release in a dry wash with reasonable potential to impact the wash. Initial investigation shows this to be a gas only release with no liquids.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Kijun Hong notified Cory Smith, Vanessa Fields, and Jim Griswold (OCD) by email on 10/5/2018 @ 9:56 am.**	

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: 10/16/2018

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	65 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☒ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 12/27/2018

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

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: Kijun Hong Title: Environmental Specialist

Signature: Date: 12/27/2018

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

OCD Only

Received by: Vanessa Fields Date: 1/3/2019

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.

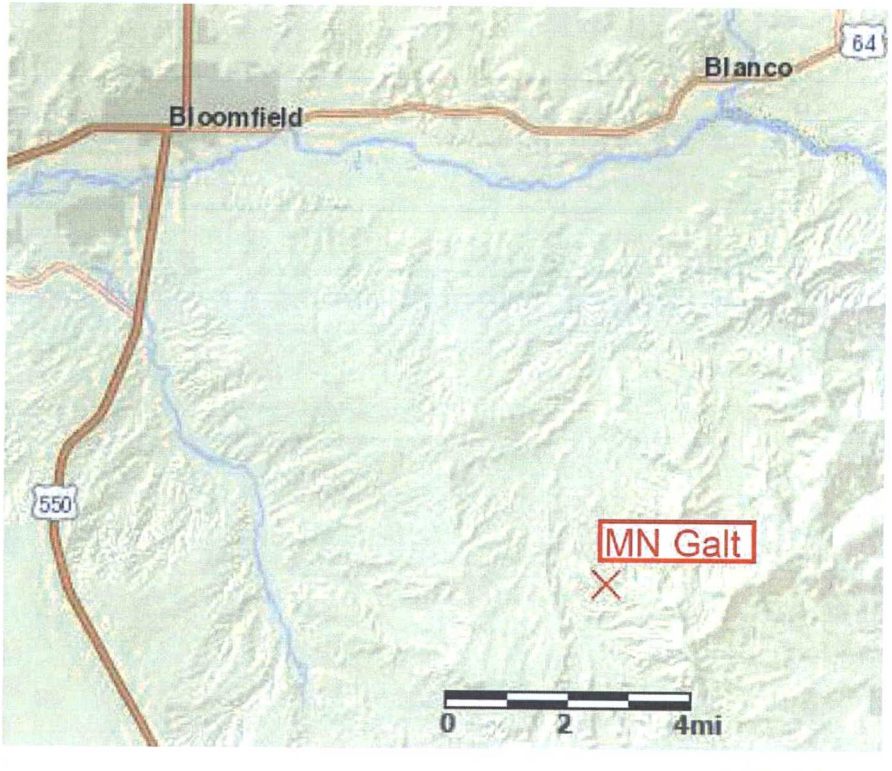
Closure Approved by: Date: 1/9/2019

Printed Name: Vanessa Fields Title: Environmental Specialist

Harvest Midstream: MN Galt
GPS Coordinates: 36.60455, -107.84971
Legal Description: Unit E, Section 6, T27N, R10W; San Juan County
Incident #: NVF1829148087; 10/4/2018

CHARACTERIZATION REPORT

MN Galt Line Leak Location



Depth to Water Determination

The nearest depth to water data was located 1,361 meters southwest, at an altitude of 6,007 feet and depth to ground water of 50 feet. Given that the release location is at an elevation of 6,017 feet, it is assumed that depth to ground water at the release location is approximately 60 feet.

POD Number	Well Depth (ft)	Depth to Water (ft)	Water Bearing Stratifications (ft)	Description	Distance / Direction from MN Galt		Well Site Elevation (ft)
SJ 04045	310	50	145-180 240-285	Sandstone/Gravel/ Conglomerate	1361 mtrs	0.88 mi SW	6007

Source: http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 04045 POD1		SJ	SJ	1	4	2	11	27N	10W	244148	4053538	1415	310	50	260

Average Depth to Water: **50 feet**

Minimum Depth: **50 feet**

Maximum Depth: **50 feet**

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 244738.78 Northing (Y): 4054825.21 Radius: 1500

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

12/4/18 4:53 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	SJ 04045 POD1	1	4	2	11	27N	10W	244148	4053538

Driller License: 717 **Driller Company:** WESTERN WATER WELLS

Driller Name: HOOD, TERRY

Drill Start Date: 09/15/2013 **Drill Finish Date:** 09/25/2013 **Plug Date:**

Log File Date: 10/01/2013 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 7 GPM

Casing Size: 5.00 **Depth Well:** 310 feet **Depth Water:** 50 feet

Water Bearing Stratifications:	Top	Bottom	Description
	145	180	Sandstone/Gravel/Conglomerate
	240	285	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	0	3
	3	12
	12	48
	48	80
	80	145
	145	180
	180	240
	240	285
	285	310

12/4/18 4:53 PM POINT OF DIVERSION SUMMARY

Determination of water sources and significant watercourses within ½-mile of release

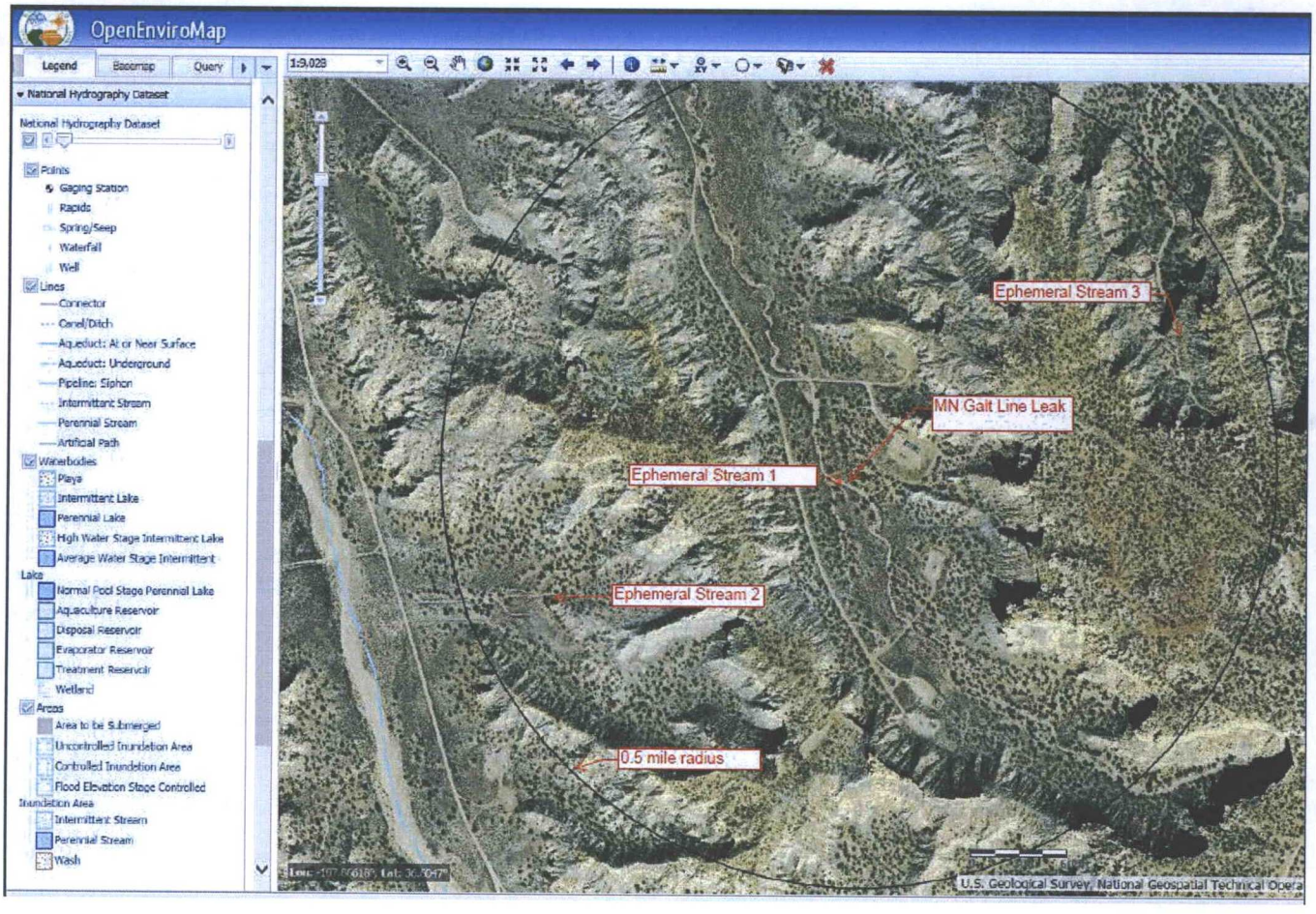
The natural gas release occurred within a dry wash, listed below as "Ephemeral Stream 1", and marked by a dashed blue line on the topo map included below.

Water Sources within ½- Mile of MN Galt

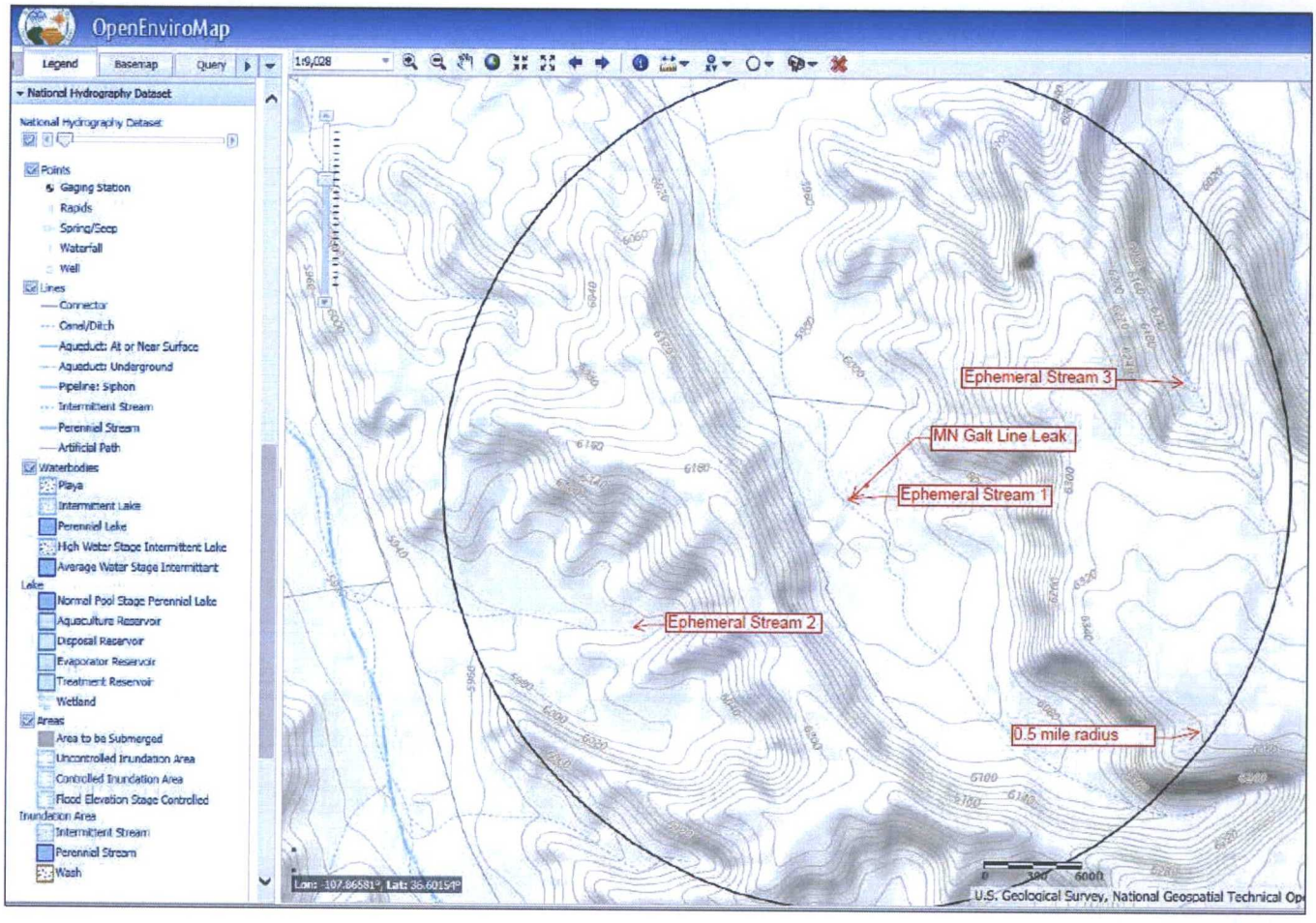
MN Galt site elevation: 6017 feet

Location Name	Distance / Direction from MN Galt		Site Elevation (ft)
Ephemeral Stream 1	0 ft	SW	6017
Ephemeral Stream 2	0.35 mi	SW	5982
Ephemeral Stream 3	0.4	NE	6131

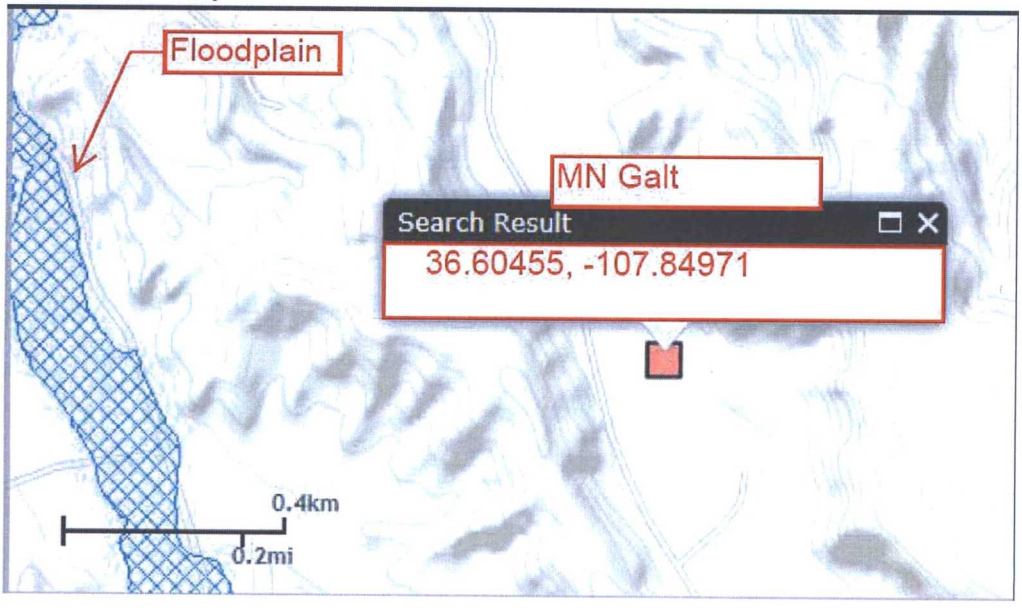
Location of MN Galt Line Leak relative to Ephemeral Streams.
Basemap: Imagery
Layers: Drinking Water Sources, National Hydrography Dataset



Location of MN Galt Line Leak relative to Ephemeral Streams.
Basemap: USGS National Map
Layers: Drinking Water Sources, National Hydrography Dataset



Distance to Floodplain



Harvest Midstream: MN Galt
GPS Coordinates: 36.60455, -107.84971
Legal Description: Unit E, Section 6, T27N, R10W; San Juan County
Incident #: NVF1829148087; 10/4/2018

CLOSURE REPORT

On October 4, 2018, a pipeline failure due to corrosion on the MN Galt which caused the release of natural gas was discovered. There was no release of liquid hydrocarbons associated with this event. An area approximately 80 feet long, 8 feet wide and 7 feet deep was excavated to ensure removal of potentially affected soil. Analytical results from all samples taken were below the remediation standard. As such, the excavated soil was returned to the pit and the ground surface was restored to its original grade.

Since the location of the pipeline leak was within a dry wash, closure criteria for a release less than 50 feet to ground water (per Table I of 19.15.29.12 NMAC) were applied. The excavation notes and analytical results are included in this report. Analytical results show that the closure requirement criteria has been met and no further action is required.

Excavation Notes and Field Data

Remediation Excavation and Sampling Form

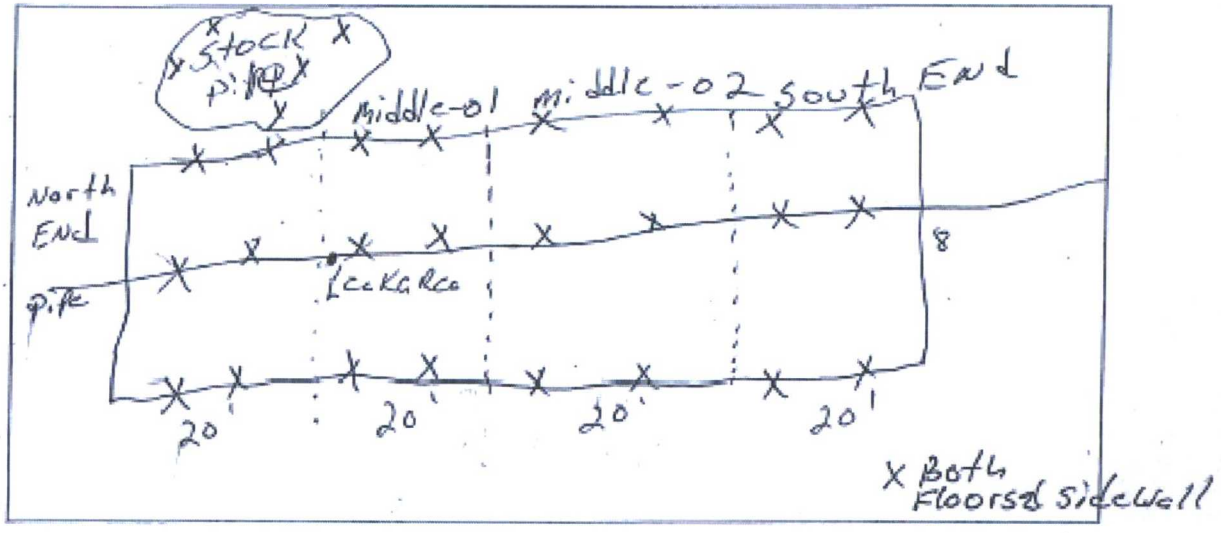
Site Name NWNGCH-Fed 1

Excavation Dimensions (feet)

80 Length 8 Width 7 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) Corey Smith

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
North End 1	10-11-18	Composite	Both	
middle 01	10-11	Composite	Both	
middle 02	10-11	Composite	Both	
South End	10-11	Composite	Both	
stockpile	10-11	composite	stockpile	

Data table of Soil Contaminant Concentration

(Full lab report included as Attachment)

Harvest Midstream								
MN Galt Line Leak							Sample Date: 10/11/2018	
Date Discovered 10/4/2018								
EPA Method	**Analyses**	**DTGW <= 50 ft Closure Criteria (mg/kg)**		**Analytic Results - Soil Sample ID**				
				North End	**Middle 01**	**Middle 02**	**South End**	**Stock Pile**
300	Chloride	n/a	600	ND	ND	ND	ND	120
8015M/D	DRO	n/a	100	ND	ND	ND	ND	11
	MRO	n/a		ND	ND	ND	ND	85
8015D	GRO	n/a		ND	ND	ND	ND	ND
8021B	Benzene	10	50	ND	ND	ND	ND	ND
	Toluene	n/a		ND	ND	ND	ND	ND
	Ethylbenzene	n/a		ND	ND	ND	ND	ND
	Xylenes, total	n/a		ND	ND	ND	ND	ND
Source: Hall Environmental Analysis Laboratory Lateral A-15 Report (10/15/2018)								

Excavation Photograph

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

October 15, 2018

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

RE: Galt MN F-1 Line Leak

OrderNo.: 1810740

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/12/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1810740**
Date Reported: **10/15/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Client Sample ID: North End
Project: Galt MN F-1 Line Leak
Collection Date: 10/11/2018 9:00:00 AM
Lab ID: 1810740-001
Matrix: MEOH (SOIL)
Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/12/2018 12:14:53 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/12/2018 10:16:51 AM	40973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/12/2018 10:16:51 AM	40973
Surr: DNOP	118	50.6-138		%Rec	1	10/12/2018 10:16:51 AM	40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/12/2018 11:19:51 AM	R54829
Surr: BFB	87.2	15-316		%Rec	1	10/12/2018 11:19:51 AM	R54829
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.017		mg/Kg	1	10/12/2018 11:19:51 AM	B54829
Toluene	ND	0.035		mg/Kg	1	10/12/2018 11:19:51 AM	B54829
Ethylbenzene	ND	0.035		mg/Kg	1	10/12/2018 11:19:51 AM	B54829
Xylenes, Total	ND	0.069		mg/Kg	1	10/12/2018 11:19:51 AM	B54829
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/12/2018 11:19:51 AM	B54829

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

Analytical Report
Lab Order **1810740**
Date Reported: **10/15/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Galt MN F-1 Line Leak
Lab ID: 1810740-002
Matrix: MEOH (SOIL)
Client Sample ID: Middle 01
Collection Date: 10/11/2018 9:10:00 AM
Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/12/2018 12:52:05 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/12/2018 10:41:11 AM	40973
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/12/2018 10:41:11 AM	40973
Surr: DNOP	104	50.6-138		%Rec	1	10/12/2018 10:41:11 AM	40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/12/2018 11:42:38 AM	R54829
Surr: BFB	89.1	15-316		%Rec	1	10/12/2018 11:42:38 AM	R54829
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	10/12/2018 11:42:38 AM	B54829
Toluene	ND	0.036		mg/Kg	1	10/12/2018 11:42:38 AM	B54829
Ethylbenzene	ND	0.036		mg/Kg	1	10/12/2018 11:42:38 AM	B54829
Xylenes, Total	ND	0.071		mg/Kg	1	10/12/2018 11:42:38 AM	B54829
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/12/2018 11:42:38 AM	B54829

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: Galt MN F-1 Line Leak
Lab ID: 1810740-003
Matrix: MEOH (SOIL)
Client Sample ID: Middle 02
Collection Date: 10/11/2018 9:15:00 AM
Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/12/2018 1:04:30 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/12/2018 11:29:47 AM	40973
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/12/2018 11:29:47 AM	40973
Surr: DNOP	103	50.6-138		%Rec	1	10/12/2018 11:29:47 AM	40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	10/12/2018 12:05:27 PM	R54829
Surr: BFB	88.6	15-316		%Rec	1	10/12/2018 12:05:27 PM	R54829
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.017		mg/Kg	1	10/12/2018 12:05:27 PM	B54829
Toluene	ND	0.034		mg/Kg	1	10/12/2018 12:05:27 PM	B54829
Ethylbenzene	ND	0.034		mg/Kg	1	10/12/2018 12:05:27 PM	B54829
Xylenes, Total	ND	0.068		mg/Kg	1	10/12/2018 12:05:27 PM	B54829
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/12/2018 12:05:27 PM	B54829

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

Analytical Report
Lab Order **1810740**
Date Reported: **10/15/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Galt MN F-1 Line Leak
Lab ID: 1810740-004
Matrix: MEOH (SOIL)
Client Sample ID: South End
Collection Date: 10/11/2018 9:20:00 AM
Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/12/2018 1:16:55 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/12/2018 11:54:08 AM	40973
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/12/2018 11:54:08 AM	40973
Surr: DNOP	108	50.6-138		%Rec	1	10/12/2018 11:54:08 AM	40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	10/12/2018 12:28:14 PM	R54829
Surr: BFB	95.6	15-316		%Rec	1	10/12/2018 12:28:14 PM	R54829
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	10/12/2018 12:28:14 PM	B54829
Toluene	ND	0.035		mg/Kg	1	10/12/2018 12:28:14 PM	B54829
Ethylbenzene	ND	0.035		mg/Kg	1	10/12/2018 12:28:14 PM	B54829
Xylenes, Total	ND	0.071		mg/Kg	1	10/12/2018 12:28:14 PM	B54829
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	10/12/2018 12:28:14 PM	B54829

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: Galt MN F-1 Line Leak
Lab ID: 1810740-005 **Matrix:** MEOH (SOIL)

Client Sample ID: Stock Pile
Collection Date: 10/11/2018 9:40:00 AM
Received Date: 10/12/2018 8:07:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	30		mg/Kg	20	10/12/2018 1:29:19 PM	40974
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	11	9.8		mg/Kg	1	10/12/2018 12:18:33 PM	40973
Motor Oil Range Organics (MRO)	85	49		mg/Kg	1	10/12/2018 12:18:33 PM	40973
Surr: DNOP	112	50.6-138		%Rec	1	10/12/2018 12:18:33 PM	40973
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/12/2018 12:50:57 PM	R54829
Surr: BFB	97.2	15-316		%Rec	1	10/12/2018 12:50:57 PM	R54829
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	10/12/2018 12:50:57 PM	B54829
Toluene	ND	0.036		mg/Kg	1	10/12/2018 12:50:57 PM	B54829
Ethylbenzene	ND	0.036		mg/Kg	1	10/12/2018 12:50:57 PM	B54829
Xylenes, Total	ND	0.073		mg/Kg	1	10/12/2018 12:50:57 PM	B54829
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	1	10/12/2018 12:50:57 PM	B54829

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#: **1810740**

15-Oct-18

Client: Harvest

Project: Galt MN F-1 Line Leak

Sample ID	**MB-40974**	SampType: **mblk**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID: **40974**			RunNo: **54842**					
Prep Date:	**10/12/2018**	Analysis Date: **10/12/2018**			SeqNo: **1823418**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-40974**	SampType: **lcs**			TestCode: **EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID: **40974**			RunNo: **54842**					
Prep Date:	**10/12/2018**	Analysis Date: **10/12/2018**			SeqNo: **1823419**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1810740**

15-Oct-18

Client: Harvest

Project: Galt MN F-1 Line Leak

Sample ID **LCS-40973**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40973**	RunNo: **54831**
Prep Date: **10/12/2018**	Analysis Date: **10/12/2018**	SeqNo: **1821180** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.5	70	130			
Surr: DNOP	4.6		5.000		91.9	50.6	138			

Sample ID **MB-40973**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40973**	RunNo: **54831**
Prep Date: **10/12/2018**	Analysis Date: **10/12/2018**	SeqNo: **1821181** 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	9.2		10.00		92.3	50.6	138			

Sample ID **1810740-005AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Stock Pile**	Batch ID: **40973**	RunNo: **54841**
Prep Date: **10/12/2018**	Analysis Date: **10/12/2018**	SeqNo: **1822093** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.2	46.08	11.50	67.9	53.5	126			
Surr: DNOP	4.6		4.608		98.9	50.6	138			

Sample ID **1810740-005AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Stock Pile**	Batch ID: **40973**	RunNo: **54841**
Prep Date: **10/12/2018**	Analysis Date: **10/12/2018**	SeqNo: **1822094** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.8	48.92	11.50	82.8	53.5	126	19.4	21.7	
Surr: DNOP	5.3		4.892		109	50.6	138	0	0	

Sample ID **LCS-40958**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40958**	RunNo: **54841**
Prep Date: **10/11/2018**	Analysis Date: **10/12/2018**	SeqNo: **1823156** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.2		5.000		104	50.6	138			

Sample ID **MB-40958**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40958**	RunNo: **54841**
Prep Date: **10/11/2018**	Analysis Date: **10/12/2018**	SeqNo: **1823157** Units: **%Rec**

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

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#: **1810740**

15-Oct-18

Client: Harvest

Project: Galt MN F-1 Line Leak

Sample ID	**MB-40958**	SampType: **MBLK**		TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID: **40958**		RunNo: **54841**					
Prep Date:	**10/11/2018**	Analysis Date: **10/12/2018**		SeqNo: **1823157**	Units: **%Rec**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		99.7	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#: **1810740**

15-Oct-18

Client: Harvest
Project: Galt MN F-1 Line Leak

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R54829**	RunNo: **54829**
Prep Date:	Analysis Date: **10/12/2018**	SeqNo: **1821217** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.6	75.9	131			
Surr: BFB	1100		1000		109	15	316			

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R54829**	RunNo: **54829**
Prep Date:	Analysis Date: **10/12/2018**	SeqNo: **1822028** 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	850		1000		85.3	15	316			

Sample ID **1810740-001A MS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **North End**	Batch ID: **R54829**	RunNo: **54829**
Prep Date:	Analysis Date: **10/12/2018**	SeqNo: **1823269** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.5	17.28	0	96.2	77.8	128			
Surr: BFB	740		691.1		107	15	316			

Sample ID **1810740-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **North End**	Batch ID: **R54829**	RunNo: **54829**
Prep Date:	Analysis Date: **10/12/2018**	SeqNo: **1823270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.5	17.28	0	93.0	77.8	128	3.43	20	
Surr: BFB	720		691.1		105	15	316	0	0	

Sample ID **LCS-40955**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **40955**	RunNo: **54829**
Prep Date: **10/11/2018**	Analysis Date: **10/12/2018**	SeqNo: **1823271** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		105	15	316			

Sample ID **MB-40955**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **40955**	RunNo: **54829**
Prep Date: **10/11/2018**	Analysis Date: **10/12/2018**	SeqNo: **1823272** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.7	15	316			

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#: **1810740**

15-Oct-18

Client: Harvest

Project: Galt MN F-1 Line Leak

Sample ID **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B54829** RunNo: **54829**

Prep Date: Analysis Date: **10/12/2018** SeqNo: **1821216** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	77.3	128			
Toluene	1.1	0.050	1.000	0	106	79.2	125			
Ethylbenzene	1.0	0.050	1.000	0	104	80.7	127			
Xylenes, Total	3.1	0.10	3.000	0	104	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120			

Sample ID **RB** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **B54829** RunNo: **54829**

Prep Date: Analysis Date: **10/12/2018** SeqNo: **1822032** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID **1810740-002A MS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **Middle 01** Batch ID: **B54829** RunNo: **54829**

Prep Date: Analysis Date: **10/12/2018** SeqNo: **1823412** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.018	0.7128	0.003721	101	68.5	133			
Toluene	0.75	0.036	0.7128	0.002523	104	75	130			
Ethylbenzene	0.73	0.036	0.7128	0	103	79.4	128			
Xylenes, Total	2.2	0.071	2.138	0	101	77.3	131			
Surr: 4-Bromofluorobenzene	0.76		0.7128		106	80	120			

Sample ID **1810740-002A MSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **Middle 01** Batch ID: **B54829** RunNo: **54829**

Prep Date: Analysis Date: **10/12/2018** SeqNo: **1823413** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.018	0.7128	0.003721	97.8	68.5	133	3.28	20	
Toluene	0.73	0.036	0.7128	0.002523	102	75	130	2.62	20	
Ethylbenzene	0.71	0.036	0.7128	0	99.3	79.4	128	3.13	20	
Xylenes, Total	2.1	0.071	2.138	0	98.4	77.3	131	2.83	20	
Surr: 4-Bromofluorobenzene	0.75		0.7128		106	80	120	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical 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#: **1810740**

15-Oct-18

Client: Harvest
Project: Galt MN F-1 Line Leak

Sample ID	**LCS-40955**	SampType: **LCS**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID: **40955**			RunNo: **54829**					
Prep Date:	**10/11/2018**	Analysis Date: **10/12/2018**			SeqNo: **1823414**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		1.1		1.000		108	80	120			

Sample ID	**MB-40955**	SampType: **MBLK**			TestCode: **EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID: **40955**			RunNo: **54829**					
Prep Date:	**10/11/2018**	Analysis Date: **10/12/2018**			SeqNo: **1823415**		Units: **%Rec**			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		1.1		1.000		110	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: **1810740** RcptNo: 1

Received By: **Victoria Zellar** 10/12/2018 8:07:00 AM Victoria Zellar

Completed By: **Ashley Gallegos** 10/12/2018 8:38:18 AM

Reviewed By: JAB 10/12/18 labeled by: IO 10/12/18

Chain of Custody

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

Log In

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

IO

# of preserved bottles checked for pH: 10/12/18 (<2 or >12 unless noted)

Adjusted?

Checked by:

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 ☐

Special Handling (if applicable)

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

Person Notified: Date

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

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			
2	2.7	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#: Kijun-Hong@willon.com

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

Accreditation
☐ NELAP ☐ Other ______

☐ EDD (Type) ______

Turn-Around Time: Same day
☐ Standard ☑ Rush 10-12-18

Project Name: Galt MN F-1 Line Leak

Project #:

Project Manager: Kijun Hong

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 2 coolers 3.9-(CF)0.6=3.3 3.3-(CF)0.6=2.7

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 Request ID	Container Type and # (AF 10/12/18 MeOH Kit)	Preservative Type	HEAL No. 1810740	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
10/11/18	9:00	soil	North End	1-4oz	Cool	-001	X		X									X				
10/11/18	9:10	soil	middle 01	1-4oz	↓	-002	X		X									X				
10/11/18	9:15	soil	middle 02	1-4oz	↓	-003	X		X									X				
10/11/18	9:20	soil	South End	1-4oz	↓	-004	X		X									X				
10/11/18	9:40	soil	StockPile	1-4oz	↓	-005	X		X									X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/11/18	1500	Morg Killion	Christi Waler	10/11/18	1500
10/11/18	1804	Christi Waler	Victoria Villa (Courier VVZ 10/12/18 8:07)	10/12/18	8:07

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.

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	1013
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party **Harvest Four Corners, LLC**	OGRID **37388**
Contact Name **Monica Sandoval**	Contact Telephone **505-632-4625**
Contact email **msandoval@harvestmidstream.com**	Incident # *(assigned by OCD)* NCS 190 3142130
Contact mailing address **1755 Arroyo Dr., Bloomfield, NM 87413**	

Location of Release Source

Latitude **36.940625** Longitude **-108.276322**
(NAD 83 in decimal degrees to 5 decimal places)

Site Name **Ute Indian A34**	Site Type **meter location / pipeline leak**
Date Release Discovered **1/9/2019**	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	**35**	**T32N**	**R14W**	**San Juan**

NMOCD
JAN 28 2019
DISTRICT III

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (*Name:* **Ute Mountain Reservation**)

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) **2 gallons**	Volume Recovered (bbls) **0**
	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) **3427 mcf**	Volume Recovered (Mcf) **0**
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release **The line leak was discovered while having difficulty building pressure to run the Trunk C Barker Dome pig. It was noticed while trending pressures in the area, and discovered that pressures were going down instead of building. The leak was coming from the end of a meter run on the Ute Indian 34 from a 1.5 inch orifice from a valve. There appeared to be a light coating of liquid mist that displayed on the snow surface. Beneath the surface there was no liquid visible. The tie in to the meter run was isolated and was blown down. Estimated gas loss was determined to be 3426.93 mcf. See attached pictures and screenshot of gas loss estimation.**

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? **At the time of discovery release was expected to exceed 500 mcf, with minimal misting of produced water.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Notice provided by Kijun Hong via email 1/9/2019 at 12:36pm. Email sent to Vanessa Fields, Cory Smith and Jim Griswold.**	

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: **Monica Sandoval** Title: **Environmental Specialist**

Signature: MonicaSandoval Date: **1/23/2019**

email: **msandoval@harvestmidstream.com** Telephone: **505-632-4625 (o) 505-947-1852 (C)**

OCD Only

Received by: Cory Smith /OCD Date: 1/28/19

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

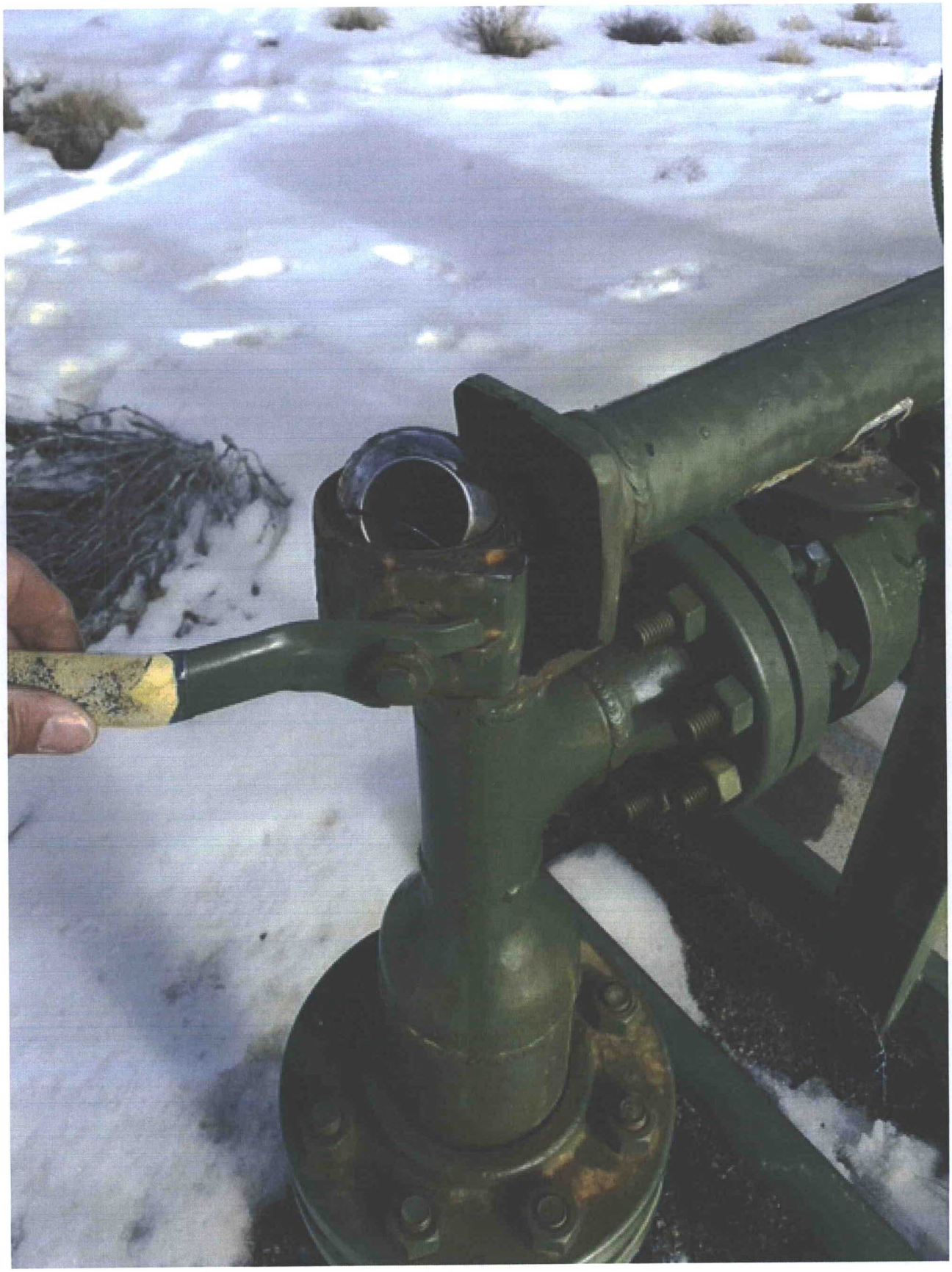
OCD Only

Received by: _____ Date: _____

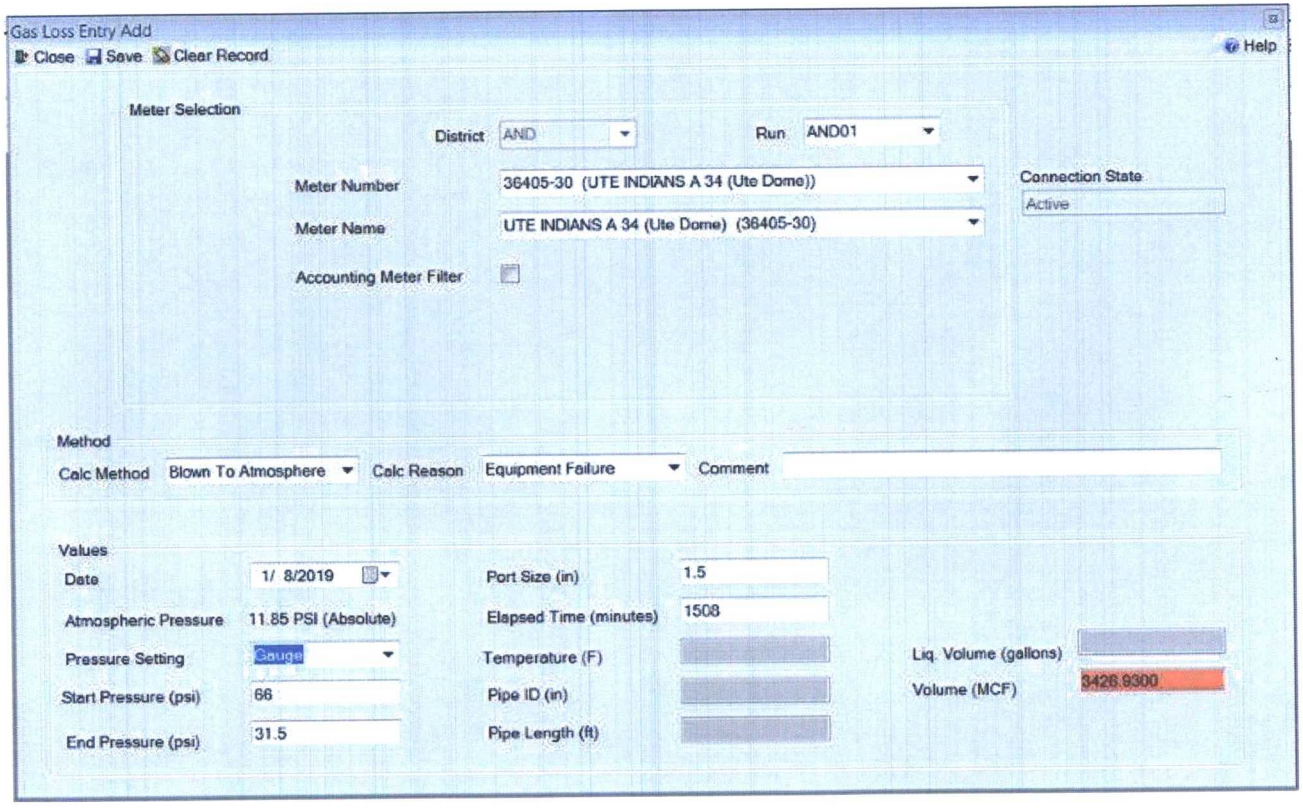
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



4
3
STANLEY
2
25ft


Gas Loss Entry Add
Close
Save
Clear Record
Help
Meter Selection
District
AND
Run
AND01
Meter Number
36405-30 (UTE INDIANS A 34 (Ute Dome))
Connection State
Active
Meter Name
UTE INDIANS A 34 (Ute Dome) (36405-30)
Accounting Meter Filter
Method
Calc Method
Blown To Atmosphere
Calc Reason
Equipment Failure
Comment
Values
Date
1/ 8/2019
Port Size (in)
1.5
Atmospheric Pressure
11.85 PSI (Absolute)
Elapsed Time (minutes)
1508
Pressure Setting
Gauge
Temperature (F)
Liq. Volume (gallons)
Start Pressure (psi)
66
Pipe ID (in)
Volume (MCF)
3426.9300
End Pressure (psi)
31.5
Pipe Length (ft)

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	NCS1827631854
District RP	
Facility ID	
Application ID	

NMOCD
MAR 23 2019
DISTRICT III

Release Notification

Responsible Party

Responsible Party	Harvest Midstream	OGRID	
Contact Name	Kijun Hong	Contact Telephone	(505) 632-4475
Contact email	kijun.hong@williams.com	Incident # *(assigned by OCD)*	NCS1827631854
Contact mailing address	1755 Arroyo Dr., Farmington, NM 87413		

Location of Release Source

Latitude 36.597103 Longitude -107.815218
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Hanks 17	Site Type Pipeline
Date Release Discovered 9/17/2018	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
M	5	27N	9W	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) ~75 bbls (104 Yards of impacted soil)	Volume Recovered (bbls) 104 Yards of impacted soil removed
	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) 26.6 MCF	Volume Recovered (Mcf) 0 MCF
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Pipeline failure due to corrosion.

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State of New Mexico
Oil Conservation Division

Incident ID	NCS1827631854
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? **Exceeded 50 cubic yards of contaminated soil removed per OCD guidance.**
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? **Yes, Cory Smith, Vanessa Field, and Jim Griswold were notified by email on 9/18/2018 by Kijun Hong.**	

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: 10/2/2018

email: kijun.hong@williams.com Telephone: 505-436-8457

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NCS1827631854
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: 3/22/2019

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

OCD Only

Received by: Vanessa Fields Date: 3/23/2019

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: 3/26/2019

Printed Name: Vanessa Fields Title: Environmental Specialist

Executive Summary

Harvest Four Corners, LLC (Harvest) presents the following report summarizing remediation and soil sampling activities at the Hanks 17 pipeline release (Site) located in Unit M, Section 5, Township 27 North, Range 9 West, in San Juan County, New Mexico (Figure 1). On September 17, 2018, Harvest discovered a release due to corrosion on the pipeline. Harvest estimated 26.6 thousand cubic feet (MCF) of natural gas and an estimated 75 barrels (bbl) of produced water were released. Approximately 104 yards of soil were impacted. The release occurred on federal land. Harvest notified the New Mexico Oil Conservation Division (NMOCD) within 24 hours via email and submitted a Release Notification and Corrective Action Form C-141 on October 2, 2018. The NMOCD assigned the release incident number NCS1827631854.

Due to impacted soil observed in a forth-order tributary to Hoot Owl Canyon, which is a significant watercourse, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 100 mg/kg total petroleum hydrocarbons (TPH); and 600 mg/kg chloride.

Harvest repaired the pipeline and excavated 104 yards of impacted soil. On September 21, 2018, Harvest collected four 5-point composite soil samples from the sidewalls and floor of the excavation. Additionally, a 6-point composite soil sample was collected from the drainage. A representative from the NMOCD was present during the soil sampling. 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 for the initial soil sampling event indicated that the West End Floor and East End Floor soil samples contained concentrations of chloride exceeding the NMOCD Table 1 closure criteria of 600 mg/kg. The East End Sidewall and West End Sidewall soil samples contained concentrations of TPH and total BTEX that exceeded the NMOCD Table 1 closure criteria. Benzene, total BTEX, TPH, and chloride concentrations in the drainage soil sample were complaint with NMOCD Table 1 closure criteria.

The excavation was extended laterally and horizontally, and subsequent soil samples were collected on September 28, 2018 and February 20, 2019. Laboratory analytical results indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria in all subsequent 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.

All final soil samples collected from the sidewalls and floor of the excavation as well as the drainage soil sample were compliant with the NMOCD Table 1 closure criteria. Harvest requests no further action for incident number NCS1827631854. A photographic log of the Site is included as Attachment 4.

ATTACHMENT 1

FIELD MAP

Remediation Excavation and Sampling Form

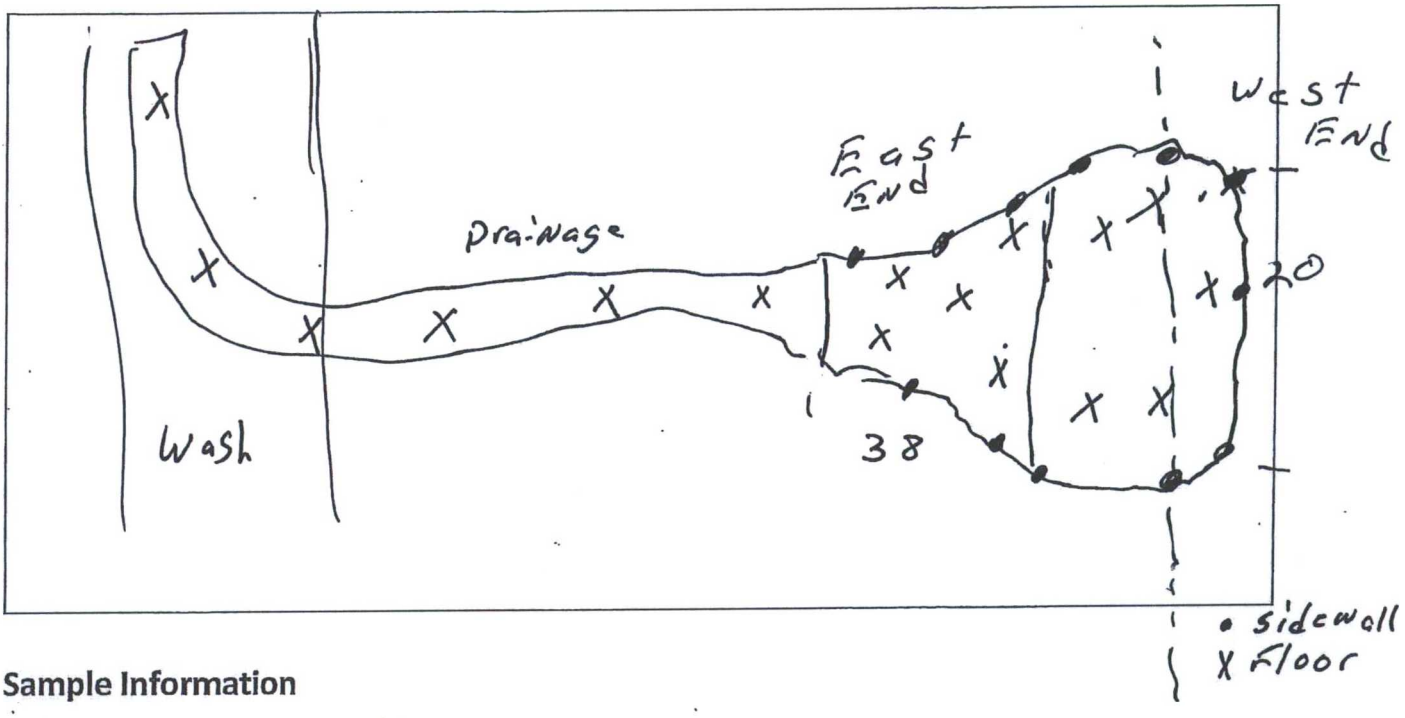
Site Name HANKS 17

Excavation Dimensions (feet)

137' Length 20' Width 3 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) corey smith

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
west END	9-21-18	composite	Floor	
East END	9-21-18	composite	Floor	
west END wall	9-21-18	composite	sidewalls	
East END wall	9-21-18	composite	sidewalls	
Drainage	9-21-18	composite	Floor	surface

ATTACHMENT 2

SOIL ANALYTICAL RESULTS

Hanks 17 Pipeline Release
Laboratory Analytical Results

Sample Location	Analyte	Unit	NMOCD Closure Criteria	Date		
				9/21/2018	9/28/2018	2/20/2019
West End Floor	Chloride	mg/kg	600	**720**	NA	<60
	TPH	mg/kg	100	81	NA	NA
	BTEX	mg/kg	50	0.43	NA	NA
	Benzene	mg/kg	10	<0.094	NA	NA
East End Floor	Chloride	mg/kg	600	**690**	NA	<60
	TPH	mg/kg	100	24	NA	NA
	BTEX	mg/kg	50	<0.39	NA	NA
	Benzene	mg/kg	10	<0.098	NA	NA
West End Sidewall	Chloride	mg/kg	600	410	NA	NA
	TPH	mg/kg	100	**1,960**	<49	NA
	BTEX	mg/kg	50	**146.92**	0.129	NA
	Benzene	mg/kg	10	0.62	<0.014	NA
East End Sidewall	Chloride	mg/kg	600	520	NA	NA
	TPH	mg/kg	100	**2,240**	9.5	NA
	BTEX	mg/kg	50	**93.1**	<0.088	NA
	Benzene	mg/kg	10	0.3	<0.022	NA
Drainage	Chloride	mg/kg	600	<30	NA	NA
	TPH	mg/kg	100	11	NA	NA
	BTEX	mg/kg	50	<0.38	NA	NA
	Benzene	mg/kg	10	<0.095	NA	NA

Notes:
BTEX: benzene, toluene, ethylbenzene, total xylenes
mg/kg: milligram per kilogram
NA: not analyzed
NMOCD: New Mexico Oil Conservation Division
TPH: total petroleum hydrocarbons
< not detected above laboratory reporting limits

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

September 26, 2018

Kijun Hong
Williams Field Services
1755 Arroyo Dr.,
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: Hanks 17 Line Leak

OrderNo.: 1809D14

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/22/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1809D14**
Date Reported: **9/26/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Hanks 17 Line Leak
Lab ID: 1809D14-001 **Matrix:** MEOH (SOIL)

Client Sample ID: West End Floor
Collection Date: 9/21/2018 10:00:00 AM
Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	720	30		mg/Kg	20	9/24/2018 12:00:54 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	81	9.9		mg/Kg	1	9/24/2018 10:53:05 AM	40532
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/24/2018 10:53:05 AM	40532
Surr: DNOP	110	50.6-138		%Rec	1	9/24/2018 10:53:05 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	9/24/2018 9:47:35 AM	G54357
Surr: BFB	116	15-316		%Rec	5	9/24/2018 9:47:35 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.094		mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Toluene	ND	0.19		mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Ethylbenzene	ND	0.19		mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Xylenes, Total	0.43	0.38		mg/Kg	5	9/24/2018 9:47:35 AM	B54357
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	5	9/24/2018 9:47:35 AM	B54357

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: Williams Field Services
Project: Hanks 17 Line Leak
Lab ID: 1809D14-002 **Matrix:** MEOH (SOIL)

Client Sample ID: East End Floor
Collection Date: 9/21/2018 10:10:00 AM
Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	690	30		mg/Kg	20	9/24/2018 12:13:18 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	24	9.7		mg/Kg	1	9/24/2018 11:15:05 AM	40532
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/24/2018 11:15:05 AM	40532
Surr: DNOP	107	50.6-138		%Rec	1	9/24/2018 11:15:05 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	9/24/2018 10:10:55 AM	G54357
Surr: BFB	115	15-316		%Rec	5	9/24/2018 10:10:55 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.098		mg/Kg	5	9/24/2018 10:10:55 AM	B54357
Toluene	ND	0.20		mg/Kg	5	9/24/2018 10:10:55 AM	B54357
Ethylbenzene	ND	0.20		mg/Kg	5	9/24/2018 10:10:55 AM	B54357
Xylenes, Total	ND	0.39		mg/Kg	5	9/24/2018 10:10:55 AM	B54357
Surr: 4-Bromofluorobenzene	94.7	80-120		%Rec	5	9/24/2018 10:10:55 AM	B54357

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: Williams Field Services
Project: Hanks 17 Line Leak
Lab ID: 1809D14-003 **Matrix:** MEOH (SOIL)

Client Sample ID: West End Sidewall
Collection Date: 9/21/2018 10:15:00 AM
Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	410	30		mg/Kg	20	9/24/2018 12:25:43 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	160	9.9		mg/Kg	1	9/24/2018 11:37:10 AM	40532
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/24/2018 11:37:10 AM	40532
Surr: DNOP	111	50.6-138		%Rec	1	9/24/2018 11:37:10 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1800	220		mg/Kg	50	9/24/2018 5:34:05 PM	G54357
Surr: BFB	227	15-316		%Rec	50	9/24/2018 5:34:05 PM	G54357
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.62	0.11		mg/Kg	5	9/24/2018 10:57:28 AM	B54357
Toluene	28	2.2		mg/Kg	50	9/24/2018 5:34:05 PM	B54357
Ethylbenzene	8.3	0.22		mg/Kg	5	9/24/2018 10:57:28 AM	B54357
Xylenes, Total	110	4.3		mg/Kg	50	9/24/2018 5:34:05 PM	B54357
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	50	9/24/2018 5:34:05 PM	B54357

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: Williams Field Services
Project: Hanks 17 Line Leak
Lab ID: 1809D14-004 **Matrix:** MEOH (SOIL)

Client Sample ID: East End Sidewalls
Collection Date: 9/21/2018 10:20:00 AM
Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	520	30		mg/Kg	20	9/24/2018 12:38:08 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	840	9.9		mg/Kg	1	9/24/2018 11:59:16 AM	40532
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/24/2018 11:59:16 AM	40532
Surr: DNOP	110	50.6-138		%Rec	1	9/24/2018 11:59:16 AM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1400	21		mg/Kg	5	9/24/2018 11:44:00 AM	G54357
Surr: BFB	1220	15-316	S	%Rec	5	9/24/2018 11:44:00 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.30	0.11		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Toluene	19	0.21		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Ethylbenzene	6.8	0.21		mg/Kg	5	9/24/2018 11:44:00 AM	B54357
Xylenes, Total	67	4.2		mg/Kg	50	9/24/2018 5:57:23 PM	B54357
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	50	9/24/2018 5:57:23 PM	B54357

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: Williams Field Services
Project: Hanks 17 Line Leak
Lab ID: 1809D14-005 **Matrix:** MEOH (SOIL)

Client Sample ID: Drainage
Collection Date: 9/21/2018 10:30:00 AM
Received Date: 9/22/2018 10:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **smb**	
Chloride	ND	30		mg/Kg	20	9/24/2018 12:50:33 PM	40536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **lrm**	
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	9/24/2018 12:21:21 PM	40532
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/24/2018 12:21:21 PM	40532
Surr: DNOP	108	50.6-138		%Rec	1	9/24/2018 12:21:21 PM	40532
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	9/24/2018 10:34:12 AM	G54357
Surr: BFB	95.9	15-316		%Rec	5	9/24/2018 10:34:12 AM	G54357
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.095		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Toluene	ND	0.19		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Ethylbenzene	ND	0.19		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Xylenes, Total	ND	0.38		mg/Kg	5	9/24/2018 10:34:12 AM	B54357
Surr: 4-Bromofluorobenzene	94.0	80-120		%Rec	5	9/24/2018 10:34:12 AM	B54357

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#: **1809D14**

26-Sep-18

Client: Williams Field Services

Project: Hanks 17 Line Leak

Sample ID **MB-40536**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **40536**	RunNo: **54365**							
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1801166**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID **LCS-40536**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **40536**	RunNo: **54365**							
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1801167**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	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#: **1809D14**

26-Sep-18

Client: Williams Field Services

Project: Hanks 17 Line Leak

Sample ID **LCS-40532**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40532**	RunNo: **54355**
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1799469** 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	106	70	130			
Surr: DNOP	4.9		5.000		97.7	50.6	138			

Sample ID **MB-40532**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40532**	RunNo: **54355**
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1799470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.6	50.6	138			

Sample ID **1809D14-005AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Drainage**	Batch ID: **40532**	RunNo: **54355**
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1799740** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.6	48.22	10.88	97.4	53.5	126			
Surr: DNOP	5.1		4.822		107	50.6	138			

Sample ID **1809D14-005AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Drainage**	Batch ID: **40532**	RunNo: **54355**
Prep Date: **9/24/2018**	Analysis Date: **9/24/2018**	SeqNo: **1799962** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	9.7	48.40	10.88	102	53.5	126	4.27	21.7	
Surr: DNOP	5.3		4.840		110	50.6	138	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#: **1809D14**

26-Sep-18

Client: Williams Field Services

Project: Hanks 17 Line Leak

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801710** 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	990		1000		98.7	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801711** 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	75.9	131			
Surr: BFB	1100		1000		115	15	316			

Sample ID **1809D14-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **West End Floor**	Batch ID: **G54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	120	19	94.05	9.480	116	77.8	128			
Surr: BFB	4800		3762		129	15	316			

Sample ID **1809D14-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **West End Floor**	Batch ID: **G54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801713** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	130	19	94.05	9.480	125	77.8	128	6.25	20	
Surr: BFB	4800		3762		127	15	316	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1809D14**

26-Sep-18

Client: Williams Field Services

Project: Hanks 17 Line Leak

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801725** 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	0.96		1.000		96.2	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801726** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.9	77.3	128			
Toluene	0.98	0.050	1.000	0	97.8	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	95.0	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	95.8	81.6	129			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.0	80	120			

Sample ID **1809D14-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East End Floor**	Batch ID: **B54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801727** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.098	3.907	0	77.1	68.5	133			
Toluene	3.2	0.20	3.907	0.09883	79.4	75	130			
Ethylbenzene	3.1	0.20	3.907	0.07305	78.3	79.4	128			S
Xylenes, Total	9.5	0.39	11.72	0.2289	78.8	77.3	131			
Surr: 4-Bromofluorobenzene	3.7		3.907		95.2	80	120			

Sample ID **1809D14-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East End Floor**	Batch ID: **B54357**	RunNo: **54357**
Prep Date:	Analysis Date: **9/24/2018**	SeqNo: **1801728** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.098	3.907	0	75.9	68.5	133	1.62	20	
Toluene	3.1	0.20	3.907	0.09883	77.5	75	130	2.40	20	
Ethylbenzene	3.1	0.20	3.907	0.07305	76.2	79.4	128	2.58	20	S
Xylenes, Total	9.3	0.39	11.72	0.2289	77.8	77.3	131	1.25	20	
Surr: 4-Bromofluorobenzene	3.7		3.907		94.9	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 Detection Limit
- 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: WILLIAMS FIELD SERVI Work Order Number: 1809D14 RcptNo: 1

Received By: Erin Melendrez 9/22/2018 10:15:00 AM

Completed By: Ashley Gallegos 9/22/2018 10:26:20 AM

Reviewed By: JAB 09/24/18 labeled by: AT 09/24/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (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	5.0	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 1755 ARROYO DR
Bloomfield NM 87413

Phone #: 505-632-4475

email or Fax#: Kijun.Hong@williams.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: Samedy
☐ Standard ☑ Rush 9-24-18

Project Name: HANKS 17 LINE LEAK

Project #:

Project Manager: KIJUN HONG

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.0

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. 1809D14	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chloride				Air Bubbles (Y or N)
9/21/18	1000	soil	West End Floor	1-402	Cool	-001	X		X									X				
9/21/18	1010	soil	East End Floor	1-402		-002	X		X									X				
9/21/18	1015	soil	West End Sidewall	1-402		-003	X		X									X				
9/21/18	1020	soil	East End Sidewalls	1-402		-004	X		X									X				
9/21/18	1030	soil	Drainage	1-402		-005	X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
9/21/18	1307	Morgan Killion	Chastity Walters	9/21/18	1307
9/21/18	1749	Chastity Walters	Courier	9/22/18	1015

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 02, 2018

Kijun Hong
Williams Field Services
1755 Arroyo Dr.,
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: Hanks 17

OrderNo.: 1809H93

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/29/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1809H93**
Date Reported: **10/2/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Hanks 17
Lab ID: 1809H93-001 **Matrix:** MEOH (SOIL)

Client Sample ID: East End Sidewalls
Collection Date: 9/28/2018 9:30:00 AM
Received Date: 9/29/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	9.5	9.1		mg/Kg	1	10/1/2018 12:33:09 PM	40692
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/1/2018 12:33:09 PM	40692
Surr: DNOP	102	50.6-138		%Rec	1	10/1/2018 12:33:09 PM	40692
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	10/1/2018 10:09:56 AM	G54538
Surr: BFB	98.4	15-316		%Rec	1	10/1/2018 10:09:56 AM	G54538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Toluene	ND	0.044		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Ethylbenzene	ND	0.044		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Xylenes, Total	ND	0.088		mg/Kg	1	10/1/2018 10:09:56 AM	B54538
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	10/1/2018 10:09:56 AM	B54538

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: Williams Field Services
Project: Hanks 17
Lab ID: 1809H93-002 **Matrix:** MEOH (SOIL)

Client Sample ID: West End Sidewalls
Collection Date: 9/28/2018 9:20:00 AM
Received Date: 9/29/2018 10:05:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/1/2018 12:57:44 PM	40692
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/1/2018 12:57:44 PM	40692
Surr: DNOP	99.5	50.6-138		%Rec	1	10/1/2018 12:57:44 PM	40692
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	2.9		mg/Kg	1	10/1/2018 10:33:35 AM	G54538
Surr: BFB	105	15-316		%Rec	1	10/1/2018 10:33:35 AM	G54538
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.014		mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Toluene	0.045	0.029		mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Ethylbenzene	ND	0.029		mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Xylenes, Total	0.084	0.058		mg/Kg	1	10/1/2018 10:33:35 AM	B54538
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	10/1/2018 10:33:35 AM	B54538

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1809H93**

02-Oct-18

Client: Williams Field Services

Project: Hanks 17

Sample ID **LCS-40692**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **40692**	RunNo: **54542**
Prep Date: **10/1/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808036** 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	86.4	70	130			
Surr: DNOP	4.8		5.000		95.6	50.6	138			

Sample ID **MB-40692**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **40692**	RunNo: **54542**
Prep Date: **10/1/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808037** 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 **1809H93-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **East End Sidewalls**	Batch ID: **40692**	RunNo: **54542**
Prep Date: **10/1/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808663** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.2	46.04	9.540	90.0	53.5	126			
Surr: DNOP	4.6		4.604		100	50.6	138			

Sample ID **1809H93-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **East End Sidewalls**	Batch ID: **40692**	RunNo: **54542**
Prep Date: **10/1/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808664** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	9.2	45.91	9.540	105	53.5	126	12.6	21.7	
Surr: DNOP	4.8		4.591		104	50.6	138	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical 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#: **1809H93**

02-Oct-18

Client: Williams Field Services

Project: Hanks 17

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808598** 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	970		1000		97.3	15	316			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808599** 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	104	75.9	131			
Surr: BFB	1100		1000		110	15	316			

Sample ID **1809H93-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **East End Sidewalls**	Batch ID: **G54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808600** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.4	21.93	0	102	77.8	128			
Surr: BFB	960		877.2		109	15	316			

Sample ID **1809H93-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **East End Sidewalls**	Batch ID: **G54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808601** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.4	21.93	0	99.5	77.8	128	2.89	20	
Surr: BFB	930		877.2		106	15	316	0	0	

Sample ID **MB-40666**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **40666**	RunNo: **54538**
Prep Date: **9/28/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808626** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		92.3	15	316			

Sample ID **LCS-40666**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **40666**	RunNo: **54538**
Prep Date: **9/28/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808627** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		108	15	316			

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#: **1809H93**

02-Oct-18

Client: Williams Field Services

Project: Hanks 17

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808634** 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	0.96		1.000		95.5	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808635** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.4	77.3	128			
Toluene	0.94	0.050	1.000	0	94.3	79.2	125			
Ethylbenzene	0.92	0.050	1.000	0	92.1	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	93.2	81.6	129			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	80	120			

Sample ID **1809H93-002AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **West End Sidewalls**	Batch ID: **B54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808636** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.54	0.014	0.5770	0.008251	92.1	68.5	133			
Toluene	0.61	0.029	0.5770	0.04512	97.7	75	130			
Ethylbenzene	0.55	0.029	0.5770	0.01269	93.7	79.4	128			
Xylenes, Total	1.8	0.058	1.731	0.08401	97.0	77.3	131			
Surr: 4-Bromofluorobenzene	0.55		0.5770		95.0	80	120			

Sample ID **1809H93-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **West End Sidewalls**	Batch ID: **B54538**	RunNo: **54538**
Prep Date:	Analysis Date: **10/1/2018**	SeqNo: **1808637** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.53	0.014	0.5770	0.008251	89.7	68.5	133	2.57	20	
Toluene	0.59	0.029	0.5770	0.04512	95.2	75	130	2.40	20	
Ethylbenzene	0.54	0.029	0.5770	0.01269	92.1	79.4	128	1.77	20	
Xylenes, Total	1.7	0.058	1.731	0.08401	94.3	77.3	131	2.72	20	
Surr: 4-Bromofluorobenzene	0.54		0.5770		93.5	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 Detection Limit
- W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1809H93**

02-Oct-18

Client: Williams Field Services

Project: Hanks 17

Sample ID **MB-40666**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **40666**	RunNo: **54538**
Prep Date: **9/28/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808662** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90		1.000		90.5	80	120			

Sample ID **LCS-40666**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **40666**	RunNo: **54538**
Prep Date: **9/28/2018**	Analysis Date: **10/1/2018**	SeqNo: **1808665** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	80	120			

Qualifiers:

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

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: WILLIAMS FIELD SERVI Work Order Number: 1809H93 RcptNo: 1

Received By: Erin Melendrez 9/29/2018 10:05:00 AM

Completed By: Ashley Gallegos 9/29/2018 10:23:09 AM

Reviewed By: JO 10/01/18 Labeled by: AG 10/01/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (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	5.1	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 1755 ARROYO DR
Bloomfield NM 87413

Phone #: 505-632-

email or Fax#: KJON.HONG@WILLIAMS.COM

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: same day
☐ Standard ☑ Rush 10-1-18

Project Name: HANKS 17

Project #:

Project Manager: KJON HONG

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.3-CF02-5.1

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. 1809H93	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
9/18/18	9:30	soil	EAST END SIDEWALLS	1-402		-001	X		X													
9/22/18	9:30	soil	WEST END SIDEWALLS	1-402		-002	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/28/18	1334	Morgan Killion	Martin Walker	9/28/18	1334
9/28/18	1856	Martin Walker	Victoria Ballan	09/29/18	10:05

Remarks:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 25, 2019

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

RE: Hanks 17

OrderNo.: 1902895

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/21/2019 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 **1902895**
Date Reported: **2/25/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Hanks 17
Lab ID: 1902895-001 **Matrix:** SOIL

Client Sample ID: West Bottom Composite 02
Collection Date: 2/20/2019 9:00:00 AM
Received Date: 2/21/2019 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	2/22/2019 6:48:53 PM	43302

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

Analytical Report
Lab Order **1902895**
Date Reported: **2/25/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Harvest
Project: Hanks 17
Lab ID: 1902895-002 **Matrix:** SOIL

Client Sample ID: East Bottom Composite
Collection Date: 2/20/2019 9:05:00 AM
Received Date: 2/21/2019 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	2/22/2019 7:01:18 PM	43302

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#: **1902895**

25-Feb-19

Client: Harvest
Project: Hanks 17

Sample ID: **MB-43302**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **43302**	RunNo: **57905**
Prep Date: **2/22/2019**	Analysis Date: **2/22/2019**	SeqNo: **1939513** Units: **mg/Kg**

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

Sample ID: **LCS-43302**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **43302**	RunNo: **57905**
Prep Date: **2/22/2019**	Analysis Date: **2/22/2019**	SeqNo: **1939514** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

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

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: **1902895** RcptNo: **1**

Received By: **Leah Baca** **2/21/2019 8:10:00 AM** Leah Baca

Completed By: **Leah Baca** **2/21/2019 8:24:04 AM** Leah Baca

Reviewed By: DAD 2/21/19

Labeled by JO 2/21/19

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 ☑

TO

# of preserved bottles checked for pH: 2/21/19 (<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

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 ☐

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	1.4	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
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: HANKS 17

Project #:

Project Manager: KIJUN HONG

Sampler: Morgan Killion

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.9

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 Request ID	Container Type and #	Preservative Type	HEAL No. 1902905	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	chlorides				Air Bubbles (Y or N)
2/20/19	9:00	soil	West Bottom Composite 02	1-402		-001												X				
2/20/19	9:05	soil	East Bottom Composite	1-402		-002												X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
2/20/19	1033	Morgan Killion		2/20/19	1023
2/20/19	1754			2/21/19	0810

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 East of Excavation.

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

NMOCD
MAR 25 2019
DISTRICT III

Release Notification

Responsible Party

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

Location of Release Source

Latitude 36.956360 Longitude -107.662966
(NAD 83 in decimal degrees to 5 decimal places)

Site Name 32-8#2	Site Type Compressor Station
Date Release Discovered 1/4/2019	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
J	27	8W	32N	San Juan

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	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)	Volume Recovered (bbls)
☒ Natural Gas	Volume Released (Mcf) 787	Volume Recovered (Mcf) 0
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Cause of Release

Extreme temperatures and liquids in the line caused the sensing line to the PRV to freeze and fail open.

Operations Technician arrived onsite and found 1.5" rupture disc blowing gas, he was able to shut the inlet off and repair the rupture disc. Failed rupture disc was removed and replaced with a new one. Upon further investigation operations verified that the pressure did not reach the rupture disc set point. Rather moisture must have got under the rain cap and built ice around the rupture disc., or ice from the scrubber vessel reached the rupture disc. The release was attributed to extreme cold freezing conditions, at the time that operations personnel arrived onsite temperature was recorded at -14F.

Upon discovery, the release was immediately stopped. Additional heat tracing was installed under the existing insulation to prevent future freezes.

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
☒ Yes ☐ No	**Unauthorized release of gases exceeding 500 MCF**

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

Yes. Via email from Kijun Hong. 1/4/2019 10:12pm (attached)

Initial Response

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Monica Sandoval Title: Environmental Specialist

Signature: MonicaSandoval Date: 1/21/2019

email: msandoval@harvestmidstream.com Telephone: 505-947-1852

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: Monica Sandoval Title: Environmental Specialist

Signature: MonicaSandoval Date: 3/21/2019

email: msandoval@harvestmidstream.com Telephone: 505-632-4625 (o) 505-947-1852 (c)

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

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Application ID	

Remediation Plan

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

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

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

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

☐ Extents of contamination must be fully delineated.

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

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

Printed Name: Monica Sandoval Title: Environmental Specialist

Signature: MonicaSandoval Date: 3/21/2019

email: msandoval@harvestmidstream.com Telephone: 505-632-4625 (o) 505-947-1852 (c)

OCD Only

Received by: Vanessa Fields Date:

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

Signature: Date:

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☐ Description of remediation activities

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

Printed Name: Monica Sandoval Title: Environmental Specialist

Signature: MonicaSandoval Date: 3/21/2019

email: msandoval@harvestmidstream.com Telephone: 505-947-1852

OCD Only

Received by: Vanessa Fields Date: 3/25/2019

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: 3/26/2019

Printed Name: Vanessa Fields Title: Environmental Specialist

From: Monica Sandoval
To: "Fields, Vanessa, EMNRD"; "Smith, Cory, EMNRD"; "Griswold, Jim, EMNRD"; "l1thomas@blm.gov"
Cc: Kijun Hong; Tristen Ruybalid
Subject: 15 Day Notification - Harvest - 32-8#2 CDP - PRV Release 1/4/2019
Date: Monday, January 21, 2019 3:32:00 PM
Attachments: Immediate Notification - Harvest 32-8 #2 PRV Release.msg
C-141 32-8#2 PRV Release - 1-21-2019 INITIAL-FINAL.pdf

My apologies – I actual found where we did provide initial notification of the release. I have attached the initial email notification to this email.

Please let me know if you need anything else.

Thank-you,
Monica

From: Monica Sandoval
Sent: Monday, January 21, 2019 3:25 PM
To: 'Fields, Vanessa, EMNRD' <Vanessa.Fields@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; l1thomas@blm.gov
Cc: Kijun Hong <khong@harvestmidstream.com>; Tristen Ruybalid <truybalid@harvestmidstream.com>
Subject: Immediate & 15 Day Notification - Harvest - 32-8#2 CDP - PRV Release 1/5/2019

Harvest Midstream had a natural gas release of 787 mcf on 1/5/2019 at our 32-8#2 Compressor Station, 36.956360, -107.662966.

There were no liquids associate with the release.

We inadvertently missed the initial notification on this release. Please let this notification serve as the initial, as well as the attached 15 day report.

Please let me know if you need any additional information.

A hard copy will be mailed to your offices.

Thank-you,

Monica Sandoval
EH&S Specialist - Harvest Midstream
msandoval@harvestmidstream.com
505-632-4625 (office)
505-947-1852 (cell)

From:	Kijun Hong
To:	Smith, Cory, EMNRD; Fields, Vanessa, EMNRD (Vanessa.Fields@state.nm.us); Griswold, Jim, EMNRD
Cc:	Monica Sandoval; Jim Stiffler; Travis Jones
Subject:	Immediate Notification - Harvest 32-8 #2 PRV Release
Date:	Friday, January 04, 2019 10:11:37 PM
Attachments:	image001.png image002.png

We had a natural gas release from a PRV at our 32-8 #2 facility (36.956360, -107.662966) earlier today and anticipate that the gas loss volume will exceed 500 MCF. There were no liquids associated with this release.

Please let this serve as immediate notification. Further details to follow.

Thank You,
Kijun

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

Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413
(505) 632-4600
www.harvestmidstream.com

Harvest Midstream – 32-8#2 Compressor Station - Gas Loss
Release Date: 1/4/2019
Incident Number:

Executive Summary

Extreme temperatures and liquids in the line caused the sensing line to the PRV to freeze and fail open.

Operations Technician arrived onsite and found 1.5" rupture disc blowing gas, he was able to shut the inlet off and repair the rupture disc. Failed rupture disc was removed and replaced with a new one. Upon further investigation operations verified that the pressure did not reach the rupture disc set point. Rather moisture must have got under the rain cap and built ice around the rupture disc., or ice from the scrubber vessel reached the rupture disc. The release was attributed to extreme cold freezing conditions, at the time that operations personnel arrived onsite temperature was recorded at -14F.

Upon discovery, the release was immediately stopped. Additional heat tracing was installed under the existing insulation to prevent future freezes.

Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413
(505) 632-4600
www.harvestmidstream.com

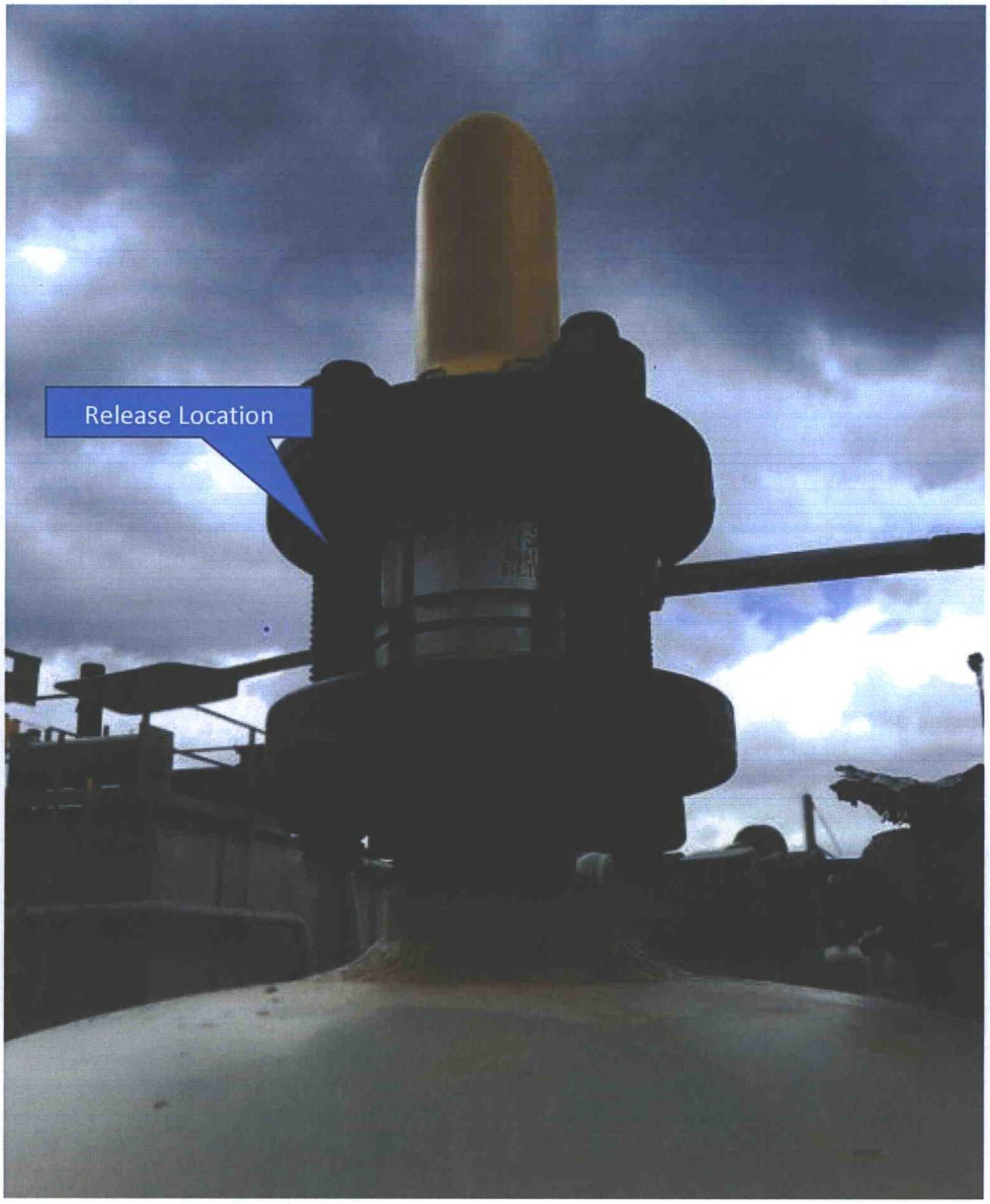
Harvest Midstream – 32-8#2 Compressor Station - Gas Loss
Release Date: 1/4/2019
Incident Number:

Site Map and Sampling Diagram

Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413
(505) 632-4600
www.harvestmidstream.com

Harvest Midstream – 32-8#2 Compressor Station - Gas Loss
Release Date: 1/4/2019
Incident Number:

Photographs



Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413
(505) 632-4600
www.harvestmidstream.com

Harvest Midstream – 32-8#2 Compressor Station - Gas Loss
Release Date: 1/4/2019
Incident Number:

Photographs

Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413
(505) 632-4600
www.harvestmidstream.com

Harvest Midstream – 32-8#2 Compressor Station - Gas Loss
Release Date: 1/4/2019
Incident Number:

Laboratory Analysis Results

No soil impacts, release was gas loss only.