AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.

App Number: pJK1424834298

3RP - 1014

Williams Four Corners, LLC

1/19/2017

3R-1014

Release Report/ General Correspondence

Williams RA

Date: Jan-Mar 2017

16

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 Mitch Morris
Address 1755 Arroyo Drive	Telephone No. 505-632-4708
Facility Name Five Points Compressor Station	Facility Type Compressor Station

Surface Owner Jicarilla Apache Tribe	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	8	25N	5W					Rio Arriba

Latitude 36.42094° N **Longitude** -107.3851° W

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release Estimated at 1544 MCF	Volume Recovered 0 MCF
Source of Release Manual dump valve	Date and Hour of Occurrence 1/31/2017, 10:00 AM MST	Date and Hour of Discovery 1/31/2017, 10:00 PM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith via Telephone	
By Whom? Mitch Morris	Date and Hour 1/31/2017 4:37 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

OIL CONS. DIV DIST. 3

FEB 15 2017

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

Describe Cause of Problem and Remedial Action Taken.*

An Operations Technician arrived on-site and discovered valves mis-aligned, allowing natural gas to vent from the fuel gas system on a compressor skid. The valve was closed, stopping the release.

Describe Area Affected and Cleanup Action Taken.*

No cleanup is required with a natural gas relese.

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.

Mitch Morris Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: Mitch Morris	
Title: Environmental Specialist	Approval Date: 3/1/2017 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: NVF1706055523 Attached ☐
Date: 2/10/2017 Phone: 505-632-4708	

* Attach Additional Sheets If Necessary

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
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State of New Mexico
Energy Minerals and Natural Resources

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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: Mitch Morris
Address: 1755 Arroyo Drive, Bloomfield, NM 87413	Telephone No.: (505) 632-4708
Facility Name: Trunk H Facility	Facility Type: Compressor Station

Surface Owner: Jicarilla Apache Nation	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
J	4	25N	5W					Rio Arriba

Latitude 36.42609° N **Longitude** -107.36172° W

NATURE OF RELEASE

Type of Release: Natural Gas	Volume of Release: 201.8 MCF Natural Gas	Volume Recovered: 0 MCF Natural gas
Source of Release: Vent Valve	Date and Hour of Occurrence: 01/8/17 at 08:30 AM MST	Date and Hour of Discovery: 01/8/17 at 08:30 AM MST
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? Not Applicable	
By Whom? Not Applicable	Date and Hour: Not Applicable	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

OIL CONS. DIV DIST. 3

JAN 20 2017

Describe Cause of Problem and Remedial Action Taken.*

A compressor dump valve was found to be in the open position when an Operations Technician arrived on-site. The valve was manually closed, stopping the release.

Describe Area Affected and Cleanup Action Taken.*

No cleanup required for natural gas vented to atmosphere.

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: Mitch Morris		
Title: Environmental Specialist	Approval Date: 2/2/2017	Expiration Date:
E-mail Address: mitch.morris@williams.com	Conditions of Approval: NVF1703332043	Attached ☐
Date: 01/17/2017 Phone: (505) 632-4708		

* Attach Additional Sheets If Necessary

1

OIL CONS. DIV DIST. 3

MAR 20 2017

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
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Energy Minerals and Natural Resources

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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 Mitch Morris
Address 1755 Arroyo Drive	Telephone No. 505-632-4708
Facility Name Lateral H-8 Pipeline Drip Tank Riser	Facility Type Pipeline

Surface Owner Jicarilla Apache Tribe	Mineral Owner	API No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	31	26N	5W					Rio Arriba

Latitude 36.4466° N **Longitude** -107.3922° W

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Estimated at 3 BBL's and 311 MCF	Volume Recovered 3 BBL's and 0 MCF
Source of Release Pipeline	Date and Hour of Occurrence 3/07/2017, 9:15 AM MST	Date and Hour of Discovery 3/07/2017, 9:15 AM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith via Telephone/follow-up email, Bryce Hammond via Voicemail	
By Whom? Mitch Morris	Date and Hour 3/07/2017 4:14 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

Describe Cause of Problem and Remedial Action Taken.*

An Operations Technician arrived on-site and discovered a split in the pipeline riser at the H-8 drip tank. This was likely caused by freezing liquids in the pipeline. A cleanup crew was mobilized the next day to excavate any impacted soil. Confirmation soil sample results are attached to this report.

Describe Area Affected and Cleanup Action Taken.*
A cleanup crew was mobilized the next day to excavate the extent of impacted soil. Confirmation soil sample results are attached to this report.

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.

Mitch Morris Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:
Printed Name: Mitch Morris	
Title: Environmental Specialist	Approval Date: 3/23/2017 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: Attached ☒
Date: 3/16/2017 Phone: 505-632-4708	NVF1707630248

* Attach Additional Sheets If Necessary

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Operator/Responsible Party,

The OCD has received the form C-141 you provided on 3/20/2017 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number NVF1707630248 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in 30 on or before 4/20/2017. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of solls with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

• Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, If any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jon Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jon.griswold@state.nm.us

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 16, 2017

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

RE: Lat H-8 OrderNo.: 1703577

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/10/2017 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 qualifers 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 **1703577**
Date Reported: **3/16/2017**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Lat H-8
Lab ID: 1703577-001 **Matrix:** SOIL

Client Sample ID: Lat H-8 Drip North End
Collection Date: 3/9/2017 1:00:00 PM
Received Date: 3/10/2017 7:08:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	3/15/2017 11:32:53 AM	30706
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/14/2017 4:42:07 PM	30662
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/14/2017 4:42:07 PM	30662
Surr: DNOP	83.9	70-130		%Rec	1	3/14/2017 4:42:07 PM	30662
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/14/2017 6:38:41 PM	30654
Surr: BFB	83.4	54-150		%Rec	1	3/14/2017 6:38:41 PM	30654
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	3/14/2017 6:38:41 PM	30654
Toluene	ND	0.046		mg/Kg	1	3/14/2017 6:38:41 PM	30654
Ethylbenzene	ND	0.046		mg/Kg	1	3/14/2017 6:38:41 PM	30654
Xylenes, Total	ND	0.093		mg/Kg	1	3/14/2017 6:38:41 PM	30654
Surr: 4-Bromofluorobenzene	91.9	66.6-132		%Rec	1	3/14/2017 6:38:41 PM	30654

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
R	RPD outside accepted recovery limits	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: Lat H-8
Lab ID: 1703577-002 **Matrix:** SOIL

Client Sample ID: Lat H-8 Drip Middle
Collection Date: 3/9/2017 1:10:00 PM
Received Date: 3/10/2017 7:08:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	3/15/2017 12:10:07 PM	30706
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/14/2017 4:13:05 PM	30662
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/14/2017 4:13:05 PM	30662
Surr: DNOP	81.8	70-130		%Rec	1	3/14/2017 4:13:05 PM	30662
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/14/2017 7:04:54 PM	30654
Surr: BFB	86.0	54-150		%Rec	1	3/14/2017 7:04:54 PM	30654
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	3/14/2017 7:04:54 PM	30654
Toluene	ND	0.049		mg/Kg	1	3/14/2017 7:04:54 PM	30654
Ethylbenzene	ND	0.049		mg/Kg	1	3/14/2017 7:04:54 PM	30654
Xylenes, Total	ND	0.097		mg/Kg	1	3/14/2017 7:04:54 PM	30654
Surr: 4-Bromofluorobenzene	94.3	66.6-132		%Rec	1	3/14/2017 7:04:54 PM	30654

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
R	RPD outside accepted recovery limits	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: Lat H-8
Lab ID: 1703577-003 **Matrix:** SOIL

Client Sample ID: Lat H-8 Drip South End
Collection Date: 3/9/2017 1:20:00 PM
Received Date: 3/10/2017 7:08:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	3/15/2017 12:47:21 PM	30706
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **MAB**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/14/2017 3:44:02 PM	30662
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/14/2017 3:44:02 PM	30662
Surr: DNOP	71.9	70-130		%Rec	1	3/14/2017 3:44:02 PM	30662
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	6.7	4.6		mg/Kg	1	3/14/2017 7:31:06 PM	30654
Surr: BFB	104	54-150		%Rec	1	3/14/2017 7:31:06 PM	30654
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.047	0.023		mg/Kg	1	3/14/2017 7:31:06 PM	30654
Toluene	0.32	0.046		mg/Kg	1	3/14/2017 7:31:06 PM	30654
Ethylbenzene	0.060	0.046		mg/Kg	1	3/14/2017 7:31:06 PM	30654
Xylenes, Total	0.70	0.093		mg/Kg	1	3/14/2017 7:31:06 PM	30654
Surr: 4-Bromofluorobenzene	89.2	66.6-132		%Rec	1	3/14/2017 7:31:06 PM	30654

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
R	RPD outside accepted recovery limits	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#: **1703577**

16-Mar-17

Client: Williams Field Services

Project: Lat H-8

Sample ID	**MB-30706**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**30706**	RunNo:	**41382**					
Prep Date:	**3/15/2017**	Analysis Date:	**3/15/2017**	SeqNo:	**1298272**	Units:	**mg/Kg**			

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

Sample ID	**LCS-30706**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**30706**	RunNo:	**41382**					
Prep Date:	**3/15/2017**	Analysis Date:	**3/15/2017**	SeqNo:	**1298273**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	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
R	RPD outside accepted recovery limits	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#: **1703577**

16-Mar-17

Client: Williams Field Services

Project: Lat H-8

Sample ID **MB-30662**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **30662**	RunNo: **41351**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1295843** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.7	70	130			

Sample ID **LCS-30662**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **30662**	RunNo: **41351**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1295844** 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	97.4	63.8	116			
Surr: DNOP	4.4		5.000		87.3	70	130			

Sample ID **1703577-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Lat H-8 Drip North E**	Batch ID: **30662**	RunNo: **41351**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296594** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.2	46.13	2.320	92.7	51.6	130			
Surr: DNOP	4.1		4.613		87.9	70	130			

Sample ID **1703577-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Lat H-8 Drip North E**	Batch ID: **30662**	RunNo: **41351**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296595** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.8	49.12	2.320	93.5	51.6	130	6.79	20	
Surr: DNOP	4.2		4.912		86.2	70	130	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
R	RPD outside accepted recovery limits	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#: **1703577**

16-Mar-17

Client: Williams Field Services

Project: Lat H-8

Sample ID	**MB-30654**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**30654**		RunNo:	**41364**				
Prep Date:	**3/13/2017**	Analysis Date:	**3/14/2017**		SeqNo:	**1296623**	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	750		1000		74.8	54	150			

Sample ID	**LCS-30654**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**30654**		RunNo:	**41364**				
Prep Date:	**3/13/2017**	Analysis Date:	**3/14/2017**		SeqNo:	**1296624**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	76.4	125			
Surr: BFB	980		1000		98.1	54	150			

Sample ID	**1703577-003AMS**	SampType:	**MS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**Lat H-8 Drip South**	Batch ID:	**30654**		RunNo:	**41364**				
Prep Date:	**3/13/2017**	Analysis Date:	**3/14/2017**		SeqNo:	**1296630**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	35	5.0	24.95	6.670	115	61.3	150			
Surr: BFB	1200		998.0		117	54	150			

Sample ID	**1703577-003AMSD**	SampType:	**MSD**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**Lat H-8 Drip South**	Batch ID:	**30654**		RunNo:	**41364**				
Prep Date:	**3/13/2017**	Analysis Date:	**3/14/2017**		SeqNo:	**1296631**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.6	23.21	6.670	113	61.3	150	7.33	20	
Surr: BFB	1100		928.5		118	54	150	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
R	RPD outside accepted recovery limits	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#: **1703577**

16-Mar-17

Client: Williams Field Services

Project: Lat H-8

Sample ID **MB-30654**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **30654**	RunNo: **41364**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296641** 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	0.83		1.000		83.0	66.6	132			

Sample ID **LCS-30654**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **30654**	RunNo: **41364**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296642** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	97.1	80	120			
Toluene	0.98	0.050	1.000	0	98.5	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.84		1.000		83.7	66.6	132			

Sample ID **1703577-001AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **Lat H-8 Drip North E**	Batch ID: **30654**	RunNo: **41364**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296647** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.024	0.9699	0	99.9	61.5	138			
Toluene	1.0	0.048	0.9699	0.006024	102	71.4	127			
Ethylbenzene	1.0	0.048	0.9699	0	108	70.9	132			
Xylenes, Total	3.2	0.097	2.910	0	110	76.2	123			
Surr: 4-Bromofluorobenzene	0.81		0.9699		83.2	66.6	132			

Sample ID **1703577-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **Lat H-8 Drip North E**	Batch ID: **30654**	RunNo: **41364**
Prep Date: **3/13/2017**	Analysis Date: **3/14/2017**	SeqNo: **1296648** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9852	0	108	61.5	138	8.98	20	
Toluene	1.1	0.049	0.9852	0.006024	108	71.4	127	7.56	20	
Ethylbenzene	1.1	0.049	0.9852	0	111	70.9	132	4.16	20	
Xylenes, Total	3.3	0.099	2.956	0	112	76.2	123	3.37	20	
Surr: 4-Bromofluorobenzene	0.82		0.9852		83.5	66.6	132	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
R	RPD outside accepted recovery limits	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: 1703577 RcptNo: 1

Received by/date: [signature] 03/10/17

Logged By: Lindsay Mangin 3/10/2017 7:08:00 AM [signature]

Completed By: Lindsay Mangin 3/10/2017 1:46:24 PM [signature]

Reviewed By: IO 3/10/17

Chain of Custody

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

Log In

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

Special Handling (if applicable)

16. 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: _____

17. Additional remarks:

18. **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: WFS

Mailing Address: 188 CR4900
Bloomfield NM 87413

Phone #:

email or Fax#: Mitch.Morris@williams.com

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

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: LAT. H-8

Project #:

Project Manager: Mitch Morris

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 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 #	Preservative Type	HEAL No. 1703577	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)
3/9/17	1:00	soil	Lat H-8 South End Drip	1-402	Cool	-001	X		X									X				
3/9/17	1:10	soil	Lat H-8 Middle Drip	1-402	Cool	-002	X		X									X				
3/9/17	1:25	soil	Lat H-8 South End Drip	1-402	Cool	-003	X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
3/9/17	1704	Morgan Killion	Mit Ward	3/9/17	1704
3/9/17	1851	Matthew Waeters		03/10/17	0708

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.