3R-1014

Release Report/ General Correspondence

Williams RA

Date: Oct-Dec 2016

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 Trunk R Pipeline	Facility Type Pipeline

Surface Owner BLM	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
I	5	26N	6W					Rio Arriba

Latitude 36.51343° N **Longitude** -107.48583° W

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release Estimated at 4071.9 MCF	Volume Recovered 0 MCF
Source of Release Pinhole leak in pipeline	Date and Hour of Occurrence 10/07/2016, 9:45 AM MST	Date and Hour of Discovery 10/12/2016, 9:45 PM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith via Telephone, Whitney Thomas via Telephone	
By Whom? Mitch Morris	Date and Hour 10/12/2016 ~2:15 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

OIL CONS. DIV DIST. 3

OCT 17 2016

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

Describe Cause of Problem and Remedial Action Taken.*

A routine leak survey crew identified a leak on the Trunk R pipeline on October 7, 2016. The pipeline was isolated and de-pressurized, stopping the leak. The pipeline has been excavated and repaired, external corrosion was determined to be the cause of the leak.

Describe Area Affected and Cleanup Action Taken.*

The pipeline has been excavated and repaired. Cleanup efforts are being evaluated, as historic impacts to soil have been encountered.

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: 11/7/2016 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: NCS1628652330 Attached ☐
Date: 10/12/2016 Phone: 505-632-4708	

* Attach Additional Sheets If Necessary

(1)

District I
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Form C-141
Revised August 8, 2011

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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 Jicarilla 150 #1	Facility Type Pipeline

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
M	1	26N	5W					Rio Arriba

Latitude 36.50976° N **Longitude** -107.31513° W

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release Estimated at 883 MCF	Volume Recovered Estimated at 0 MCF
Source of Release Pinhole leak in pipeline	Date and Hour of Occurrence 09/27/2016, 2:30 PM MST	Date and Hour of Discovery 09/27/2016, 2:30 PM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Vanessa Fields via Telephone	
By Whom? Mitch Morris	Date and Hour 10/07/2016 ~9:22 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

OIL CONS. DIV DIST. 3

OCT 13 2016

Describe Cause of Problem and Remedial Action Taken.*

A routine leak survey crew identified a leak on the Jicarilla 150 #1 pipeline. The line was immediately isolated and de-pressurized, stopping the leak.

Describe Area Affected and Cleanup Action Taken.*

The pipeline has been repaired. This was exposed pipe with no impact to soil.

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: 11/17/2016 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: NVF1632238319 Attached ☐
Date: 10/07/2016 Phone: 505-632-4708	

* Attach Additional Sheets If Necessary

(1)

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Energy Minerals and Natural Resources

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Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

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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 Jicarilla Lateral D-2	Facility Type Pipeline

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
A	12	26N	5W					Rio Arriba

Latitude 36.50705° N **Longitude** -107.30372° W

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release Estimated at 923.6 MCF	Volume Recovered Estimated at 0 MCF
Source of Release Pinhole leak in pipeline	Date and Hour of Occurrence 09/28/2016, 2:30 PM MST	Date and Hour of Discovery 09/28/2016, 2:30 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 10/06/2016 ~10:33 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

OIL CONS. DIV DIST. 3

OCT 13 2016

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

Describe Cause of Problem and Remedial Action Taken.*

A routine leak survey crew identified a leak on the Jicarilla Lateral D-2 pipeline. The pipeline was isolated and de-pressurized, stopping the leak.

Describe Area Affected and Cleanup Action Taken.*

The pipeline has been repaired.

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: 11/17/2016	Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: NVF1632248865	Attached ☐
Date: 10/07/2016 Phone: 505-632-4708		

* Attach Additional Sheets If Necessary

(1)

OIL CONS. DIV DIST. 3

SEP 29 2016

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 Drive, Bloomfield, NM 87413**	Telephone No. **505-632-4475**
Facility Name **Lateral M-4**	Facility Type **Pipeline**

Surface Owner **Forest Service**	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
M	**3**	**30N**	**4W**					**Rio Arriba**

Latitude 36.835 Longitude -107.2484

NATURE OF RELEASE

Type of Release **Natural Gas**	Volume of Release **376 MCF natural gas;**	Volume Recovered **0**
Source of Release **Pipeline Strike**	Date and Hour of Occurrence **9/14/2016, 1:00 PM MST**	Date and Hour of Discovery **9/14/2016, 1:00 PM MST**
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A road maintenance crew was blading the road when they struck the line which was properly marked and identified. There was no injury to personnel, no fire, and no need for emergency response. The line was shut in. 376 mcf of gas loss with no liquids release. The damaged line has been repaired.

Describe Area Affected and Cleanup Action Taken.*

The damaged line has been repaired. No impacts.

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: [signature]	OIL CONSERVATION DIVISION Approved by Environmental Specialist: [signature]	
Printed Name: **Kijun Hong**		
Title: **Environmental Specialist**	Approval Date: 12/6/16	Expiration Date:
E-mail Address: **Kijun.Hong@Williams.com**	Conditions of Approval: 3R-1014	Attached ☐
Date: **09/28/2016** Phone: **505-632-4475**		

* Attach Additional Sheets If Necessary

#NCS1634054734

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Energy Minerals and Natural Resources

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

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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 Jicarilla Lateral D-2	Facility Type Pipeline

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
H	12	26N	5W					Rio Arriba

Latitude 36.50190° N **Longitude** -107.30280° W

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release Estimated at 399.39 MCF	Volume Recovered Estimated at 0 MCF
Source of Release Pinhole leak in pipeline	Date and Hour of Occurrence 11/04/2016, 3:00 PM MST	Date and Hour of Discovery 11/04/2016, 3:00 PM MST
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. Not Applicable	

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

OIL CONS. DIV DIST. 3

NOV 21 2016

Describe Cause of Problem and Remedial Action Taken.*

An Operations Technician identified a leak on the Jicarilla Lateral D-2 pipeline during routine operations.

Describe Area Affected and Cleanup Action Taken.*

The pipeline has been repaired.

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: 12/7/16 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: Sample for TPH (DRO-GRO-MRO), BTEX Attached ☒ COA if Excavation & Haul is not used
Date: 11/17/2016 Phone: 505-632-4708	

* Attach Additional Sheets If Necessary

#NCS1634242616

(3)

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 11/21/16 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number NCS 1634242616 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 III office in Aztec on or before 1/7/17. 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 soils 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.

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

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Revised August 8, 2011

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company **Williams Four Corners LLC**	Contact **Kijun Hong**
Address **1755 Arroyo Dr., Bloomfield, NM 87413**	Telephone No. **505-632-4475**
Facility Name **31-6 CDP**	Facility Type **Compressor Station**

Surface Owner **BLM**	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
N	**1**	**30N**	**6W**					**Rio Arriba**

Latitude 36.83592 Longitude -107.42001

NATURE OF RELEASE

Type of Release **Natural Gas**	Volume of Release **3,942.9 MCF Natural Gas**	Volume Recovered **0 MCF**
Source of Release **Station discharge pressure safety valve (PSV)**	Date and Hour of Occurrence **10/18/2016, 08:30 AM MST**	Date and Hour of Discovery **10/18/2016, 09:45 AM MST**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Cory Smith**	
By Whom? **Mike Hannan**	Date and Hour **10/18/2016, 4:35 PM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

OIL CONS. DIV DIST. 3
OCT 26 2016

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Due to pressure build up in the pipeline caused by the El Cedro plant going down, the pressure safety valve at 31-6 lifted releasing 3,942.9 MCF of natural gas to atmosphere.

Describe Area Affected and Cleanup Action Taken.*

No cleanup required with gas released 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: **Kijun Hong**	
Title: **Environmental Specialist**	Approval Date: 12/9/2016 Expiration Date:
E-mail Address: Kijun.Hong@williams.com	Conditions of Approval: NCS1629353483 Attached ☐
Date: **October 21, 2016** Phone: **505-632-4475**	

* Attach Additional Sheets If Necessary

1

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Williams Four Corners LLC	Contact: Michael Hannan
Address: 1755 Arroyo Dr., Bloomfield, NM 87413	Telephone No.: (505) 632-4807
Facility Name: 29-6#2 Central Delivery Point	Facility Type: Central Delivery Point

Surface Owner: Private	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	19	29N	6W					Rio Arriba

Latitude 36.74497° N **Longitude** -107.44417° W

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 5 bbls	Volume Recovered: 0 bbls
Source of Release: Tank	Date and Hour of Occurrence: 08/5/2016 5:00 P.M.	Date and Hour of Discovery: 08/17/2016 12:00 P.M.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith via phone call	OIL CONS. DIV DIST. 3
By Whom? Mitch Morris	Date and Hour: 8/17/2016 3:00 PM	
Was a Watercourse Reached? ☒ Yes ☐ No	If YES, Volume Impacting the Watercourse. 5 bbls	OCT 12 2016

If a Watercourse was Impacted, Describe Fully.*
The water migrated approximately ½ mile to a livestock pond. The livestock pond is located at 36.752100, -107.445998. The water from the storm event was not observed to have migrated past the livestock pond.

Describe Cause of Problem and Remedial Action Taken.*
Recent heavy rains washed out the berm that was constructed to control potential surface run-on into a below-grade tank (BGT) containment. The surface water run-on filled the containment and then washed out another portion of the berm causing the release of water from the secondary containment area. The water released from the secondary containment was a mixture of rain water and produced water tank overflow. A surface water sample (POND-1) was collected from the livestock pond located down-gradient from the release area depicted in Figure 1. Surface water results indicate that all results were below applicable water quality standards. Soil samples were collected from the down-gradient flow path area as depicted in Figures 1 and 2, as well as from the excavation area surrounding the BGT. A summary of the soil analytical results are presented in Table 1 and the laboratory analytical reports are attached.

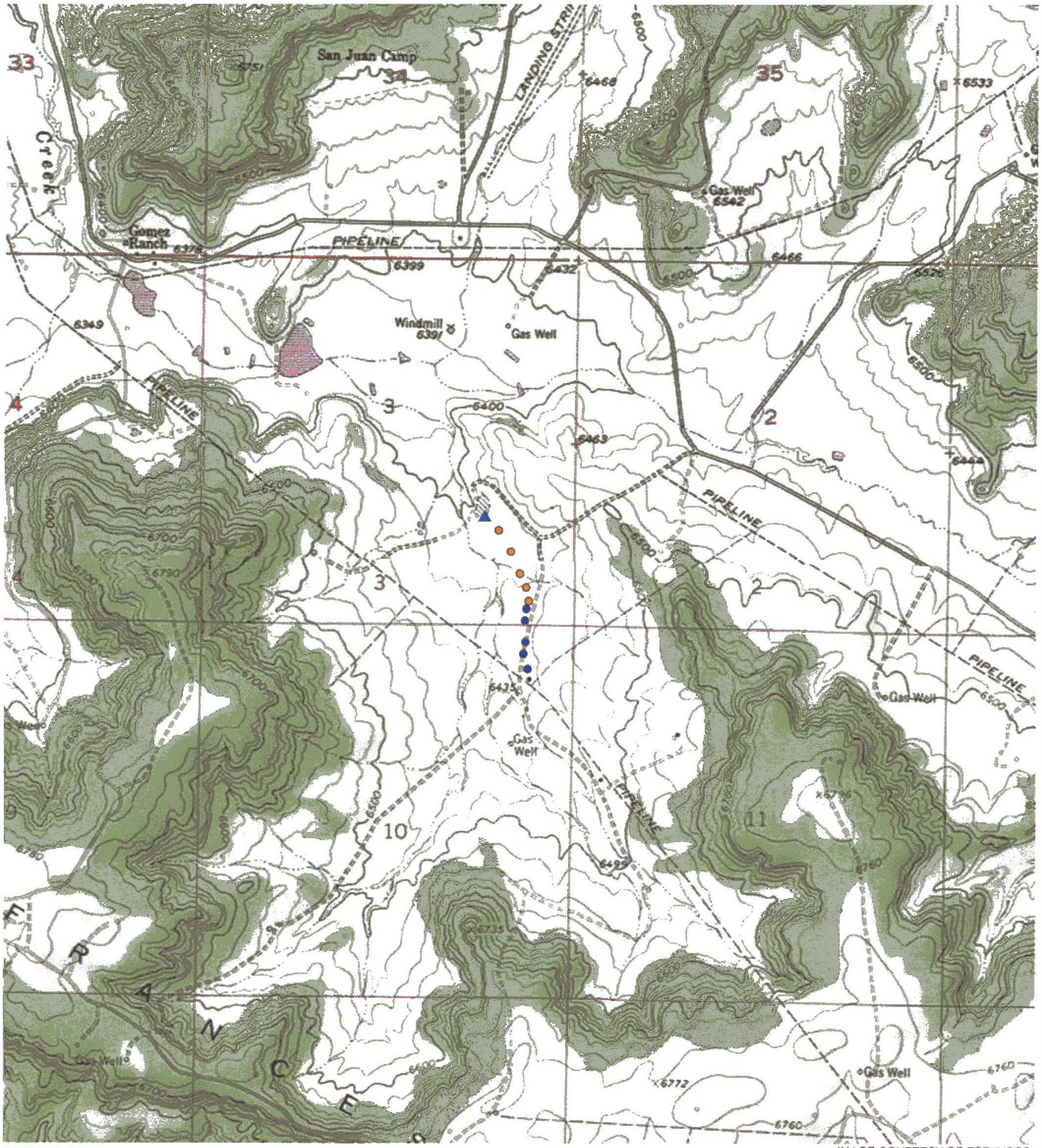
Describe Area Affected and Cleanup Action Taken.*
Staining was observed at a few locations along the surface water flow path toward the livestock pond. Williams removed the stained vegetation debris observed along the flow path as well a minor amount of stained soil. Excavation activities were performed surrounding the BGT. The soil analytical results indicate concentrations are below remediation action levels. Additional excavation of the east wall was performed based on the September 7, 2016 sample result. Following completion of additional excavation of the east wall, a sample was collected on September 16, 2016 indicating remediation action levels were achieved.

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
Printed Name: Michael Hannan	Approved by Environmental Specialist:
Title: Engineer, Sr.	Approval Date: 12/9/16 Expiration Date:
E-mail Address: michael.hannan@williams.com	Conditions of Approval: Attached ☐
Date: 09/30/2016 Phone: (505) 632-4807	

* Attach Additional Sheets If Necessary #NCS1626049708

38



LEGEND

- SS-1 ALIQUOT SOIL SAMPLE
- SS-2 ALIQUOT SOIL SAMPLE
- POND SAMPLE

NEW MEXICO

0 2,000 4,000
Feet

N

FIGURE 1
SITE LOCATION MAP
29-6 #2 RELEASE RESPONSE
RIO ARRIBA COUNTY, NEW MEXICO

WILLIAMS FOUR CORNERS LLC

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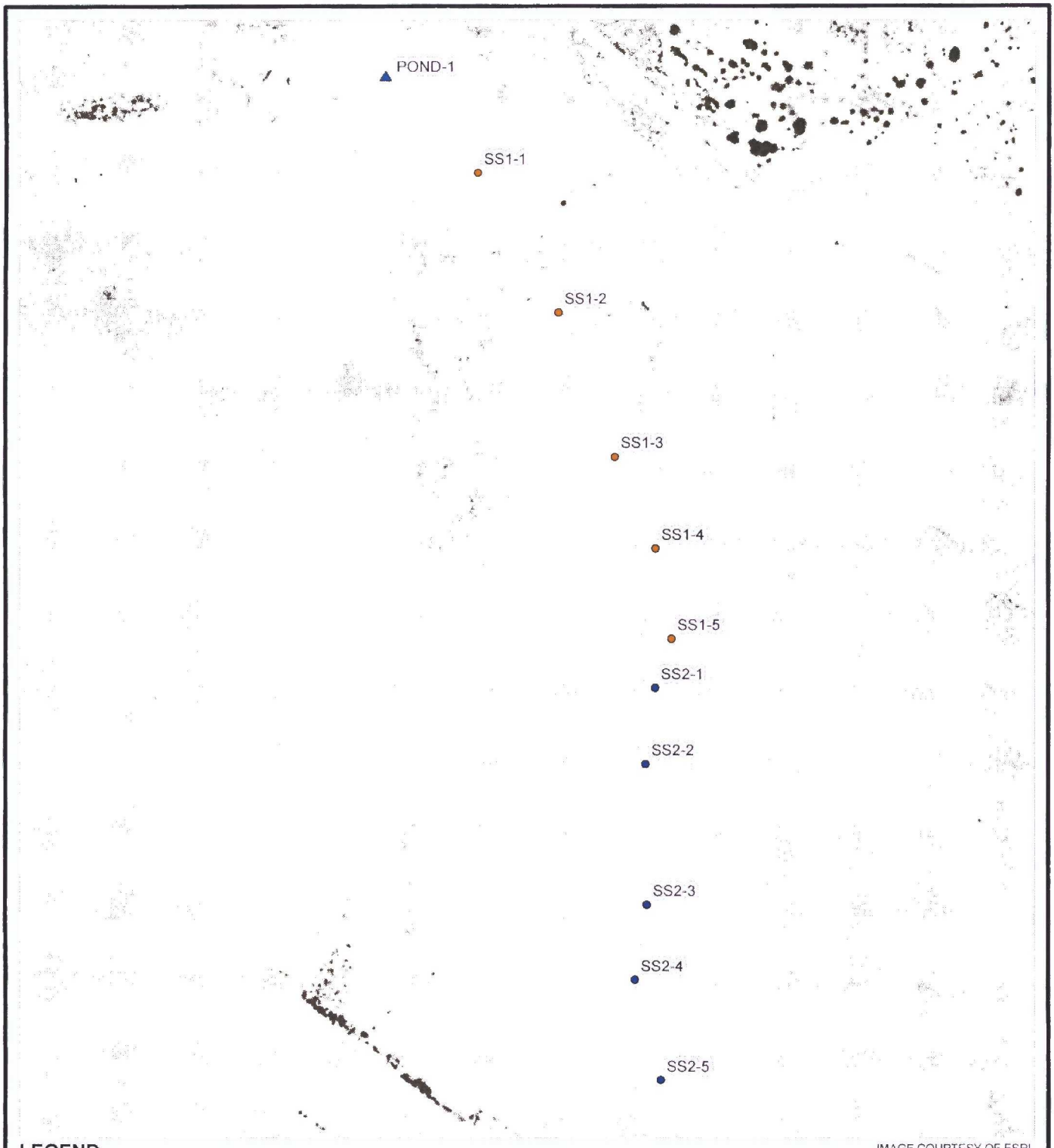

FIGURE 2
SAMPLE LOCATIONS
29-6 #2 RELEASE RESPONSE
RIO ARRIBA COUNTY, NEW MEXICO

WILLIAMS FOUR CORNERS LLC

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TABLE 1

SOIL ANALYTICAL RESULTS
WILLIAMS FOUR CORNERS, LLC
29-6 #2 CDP/Trunk F

Soil Sample ID	Sample Date	Sample Location	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS-1	8/18/2016	Down-gradient (North)	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<10	ND	NA
SS-2	8/18/2016	Down-gradient (South)	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<10	ND	NA
TRK-F Pit North Wall	9/7/2016	North Wall	<0.020	<0.039	<0.039	<0.078	ND	19	40	59	<30
TRK-F Pit South Wall	9/7/2016	South Wall	<0.021	<0.043	<0.043	0.69	0.69	53	<9.7	53	<30
TRK-F Pit East Wall	9/7/2016	East Wall	<0.29	<0.59	<0.59	22	22	1200	29	1229	<30
TRK-F Pit West Wall	9/7/2016	West Wall	<0.021	<0.041	<0.041	<0.083	ND	<4.1	<9.4	ND	45
TRK-F Pit Bottom	9/7/2016	Floor	<0.10	<0.20	<0.20	<0.40	ND	<20	<9.7	ND	36
TRK-F East Wall	9/16/2016	East Wall	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<9.6	ND	NA
NMOCD Remediation Action Levels			**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**100**	**NE**

NOTES:

< - indicates result is less than the stated laboratory reporting limit

Bold - indicates value exceeds stated NMOCD standard

mg/kg - milligrams per kilogram

BTEX - Benzene, Toluene, Ethylbenzene, Total Xylenes

GRO - gasoline range organics

DRO - diesel range organics

TPH- total petroleum hydrocarbons

NMOCD - New Mexico Oil Conservation Division

NE - Not Established

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 25, 2016

Brooke Herb
Williams Four Corners
188 CR 4900
Bloomfield, NM 87413
TEL: (505) 632-4442
FAX

RE: 29-6 #2 Release Response OrderNo.: 1608B70

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/19/2016 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 **1608B70**
Date Reported: **8/25/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Four Corners
Project: 29-6 #2 Release Response
Lab ID: 1608B70-001 **Matrix:** AQUEOUS

Client Sample ID: Pond-1
Collection Date: 8/18/2016 1:30:00 PM
Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Toluene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Ethylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,3,5-Trimethylbenzene	1.5	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Naphthalene	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Acetone	ND	10		µg/L	1	8/19/2016 7:38:00 PM	R36641
Bromobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Bromoform	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Bromomethane	ND	3.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
2-Butanone	ND	10		µg/L	1	8/19/2016 7:38:00 PM	R36641
Carbon disulfide	ND	10		µg/L	1	8/19/2016 7:38:00 PM	R36641
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Chlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Chloroethane	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Chloroform	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Chloromethane	ND	3.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Dibromomethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
2,2-Dichloropropane	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641

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.

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Client Sample ID: Pond-1
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Collection Date: 8/18/2016 1:30:00 PM
Lab ID: 1608B70-001
Matrix: AQUEOUS
Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
2-Hexanone	ND	10		µg/L	1	8/19/2016 7:38:00 PM	R36641
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2016 7:38:00 PM	R36641
Methylene Chloride	ND	3.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
n-Butylbenzene	ND	3.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Styrene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Vinyl chloride	ND	1.0		µg/L	1	8/19/2016 7:38:00 PM	R36641
Xylenes, Total	1.7	1.5		µg/L	1	8/19/2016 7:38:00 PM	R36641
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%Rec	1	8/19/2016 7:38:00 PM	R36641
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	8/19/2016 7:38:00 PM	R36641
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	8/19/2016 7:38:00 PM	R36641
Surr: Toluene-d8	97.5	70-130		%Rec	1	8/19/2016 7:38:00 PM	R36641

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

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Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Four Corners
Project: 29-6 #2 Release Response
Lab ID: 1608B70-002 **Matrix:** AQUEOUS

Client Sample ID: Trip Blank
Collection Date:
Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BCN**	
Benzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Toluene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Ethylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Naphthalene	ND	2.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
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Bromomethane	ND	3.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
2-Butanone	ND	10		µg/L	1	8/19/2016 6:51:00 PM	R36641
Carbon disulfide	ND	10		µg/L	1	8/19/2016 6:51:00 PM	R36641
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Chlorobenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
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Dibromomethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
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1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
2,2-Dichloropropane	ND	2.0		µg/L	1	8/19/2016 6:51:00 PM	R36641

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

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Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
2-Hexanone	ND	10		µg/L	1	8/19/2016 6:51:00 PM	R36641
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2016 6:51:00 PM	R36641
Methylene Chloride	ND	3.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
n-Butylbenzene	ND	3.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Styrene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
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1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Vinyl chloride	ND	1.0		µg/L	1	8/19/2016 6:51:00 PM	R36641
Xylenes, Total	ND	1.5		µg/L	1	8/19/2016 6:51:00 PM	R36641
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	8/19/2016 6:51:00 PM	R36641
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	8/19/2016 6:51:00 PM	R36641
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	8/19/2016 6:51:00 PM	R36641
Surr: Toluene-d8	97.3	70-130		%Rec	1	8/19/2016 6:51:00 PM	R36641

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

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Analytical Report
Lab Order **1608B70**
Date Reported: **8/25/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Four Corners
Project: 29-6 #2 Release Response
Lab ID: 1608B70-003 **Matrix:** SOIL

Client Sample ID: SS-1
Collection Date: 8/18/2016 2:30:00 PM
Received Date: 8/19/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/23/2016 9:43:06 AM	27095
Motor Oil Range Organics (MRO)	130	50		mg/Kg	1	8/23/2016 9:43:06 AM	27095
Surr: DNOP	93.9	70-130		%Rec	1	8/23/2016 9:43:06 AM	27095
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2016 5:02:02 PM	27081
Surr: BFB	80.4	68.3-144		%Rec	1	8/24/2016 5:02:02 PM	27081
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/23/2016 3:05:18 AM	27081
Toluene	ND	0.047		mg/Kg	1	8/23/2016 3:05:18 AM	27081
Ethylbenzene	ND	0.047		mg/Kg	1	8/23/2016 3:05:18 AM	27081
Xylenes, Total	ND	0.095		mg/Kg	1	8/23/2016 3:05:18 AM	27081
Surr: 4-Bromofluorobenzene	97.7	80-120		%Rec	1	8/23/2016 3:05:18 AM	27081

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 Four Corners
Client Sample ID: SS-2
Project: 29-6 #2 Release Response
Collection Date: 8/18/2016 2:38:00 PM
Lab ID: 1608B70-004 **Matrix:** SOIL **Received Date:** 8/19/2016 7:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/23/2016 10:10:50 AM	27095
Motor Oil Range Organics (MRO)	69	50		mg/Kg	1	8/23/2016 10:10:50 AM	27095
Surr: DNOP	85.1	70-130		%Rec	1	8/23/2016 10:10:50 AM	27095
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2016 5:25:28 PM	27081
Surr: BFB	81.1	68.3-144		%Rec	1	8/24/2016 5:25:28 PM	27081
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/23/2016 3:28:41 AM	27081
Toluene	ND	0.047		mg/Kg	1	8/23/2016 3:28:41 AM	27081
Ethylbenzene	ND	0.047		mg/Kg	1	8/23/2016 3:28:41 AM	27081
Xylenes, Total	ND	0.094		mg/Kg	1	8/23/2016 3:28:41 AM	27081
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	8/23/2016 3:28:41 AM	27081

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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **LCS-27095**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **LCSS**	Batch ID: **27095**			RunNo: **36683**					
Prep Date: **8/22/2016**	Analysis Date: **8/23/2016**			SeqNo: **1136774**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.9	62.6	124			
Surr: DNOP	4.2		5.000		83.3	70	130			

Sample ID **MB-27095**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**					
Client ID: **PBS**	Batch ID: **27095**			RunNo: **36683**					
Prep Date: **8/22/2016**	Analysis Date: **8/23/2016**			SeqNo: **1136775**		Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	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
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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **MB-27081**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **27081**	RunNo: **36716**
Prep Date: **8/19/2016**	Analysis Date: **8/22/2016**	SeqNo: **1137915** 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	840		1000		83.8	68.3	144			

Sample ID **LCS-27081**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **27081**	RunNo: **36716**
Prep Date: **8/19/2016**	Analysis Date: **8/22/2016**	SeqNo: **1137916** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.8	80	120			
Surr: BFB	920		1000		92.1	68.3	144			

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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **MB-27081**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **27081**	RunNo: **36716**
Prep Date: **8/19/2016**	Analysis Date: **8/22/2016**	SeqNo: **1137943** 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	0.99		1.000		99.3	80	120			

Sample ID **LCS-27081**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **27081**	RunNo: **36716**
Prep Date: **8/19/2016**	Analysis Date: **8/22/2016**	SeqNo: **1137944** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.2	75.3	123			
Toluene	0.97	0.050	1.000	0	97.1	80	124			
Ethylbenzene	1.0	0.050	1.000	0	103	82.8	121			
Xylenes, Total	3.1	0.10	3.000	0	102	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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
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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R36641**	RunNo: **36641**
Prep Date:	Analysis Date: **8/19/2016**	SeqNo: **1134966** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.9	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.3	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R36641**	RunNo: **36641**
Prep Date:	Analysis Date: **8/19/2016**	SeqNo: **1134967** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R36641**	RunNo: **36641**
Prep Date:	Analysis Date: **8/19/2016**	SeqNo: **1134967** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

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#: **1608B70**

25-Aug-16

Client: Williams Four Corners

Project: 29-6 #2 Release Response

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R36641**	RunNo: **36641**
Prep Date:	Analysis Date: **8/19/2016**	SeqNo: **1134967** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.5	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.5	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.4	70	130			
Surr: Toluene-d8	9.6		10.00		96.4	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
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: WILLIAMS FOUR CORN Work Order Number: 1608B70 RcptNo: 1

Received by/date: AG 08/19/16

Logged By: Anne Thorne 8/19/2016 7:30:00 AM Anne Thorne

Completed By: Anne Thorne 8/19/2016 Anne Thorne

Reviewed By: aJ 08/19/16

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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
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 ☐

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

Adjusted? _____

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

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: Mitch Morris
Williams Four Corners
Mailing Address: 188 County Road 4900
Bloomfield, New Mexico 87413
Phone #: 505-632-4708
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: 29-6#2 Release Response
Project #: PO - UP151806
Project Manager: Brooke Herb
Sampler: Brooke Herb
On Ice: ☒ Yes ☐ No
Sample Temperature: 2

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1608 R70	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)
8/16	1330	AQ	Pond-1	VOA/	HCl	701										X						
8/16		AQ	Trip Blank	VOA	HCl	702										X						
8/16	1430	Soil	SS-1	4oz/2	cool	703	X		X													
8/16	1438	Soil	SS-2	4oz/2	cool	704	X		X													

Date	Time	Relinquished by:	Received by:	Date	Time
8/16	1700			8/16/16	1700
8/18/16	2046			08/19/16	0730

Remarks: Please copy results to: bherb@ltenv.com Due on per CW cash Ag Sample 08/22/16

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

September 09, 2016

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

RE: Trunk F Pit OrderNo.: 1609323

Dear Michael Hannan:

Hall Environmental Analysis Laboratory received 5 sample(s) on 9/8/2016 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 **1609323**
Date Reported: **9/9/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk F Pit
Lab ID: 1609323-001
Matrix: MEOH (SOIL)
Client Sample ID: TRK-F Pit North Wall
Collection Date: 9/7/2016 1:30:00 PM
Received Date: 9/8/2016 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/8/2016 10:34:38 AM	27403
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	40	10		mg/Kg	1	9/8/2016 10:49:30 AM	27392
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/8/2016 10:49:30 AM	27392
Surr: DNOP	108	70-130		%Rec	1	9/8/2016 10:49:30 AM	27392
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	19	3.9		mg/Kg	1	9/8/2016 11:20:11 AM	27376
Surr: BFB	386	68.3-144	S	%Rec	1	9/8/2016 11:20:11 AM	27376
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.020		mg/Kg	1	9/8/2016 11:20:11 AM	27376
Toluene	ND	0.039		mg/Kg	1	9/8/2016 11:20:11 AM	27376
Ethylbenzene	ND	0.039		mg/Kg	1	9/8/2016 11:20:11 AM	27376
Xylenes, Total	ND	0.078		mg/Kg	1	9/8/2016 11:20:11 AM	27376
Surr: 4-Bromofluorobenzene	117	80-120		%Rec	1	9/8/2016 11:20:11 AM	27376

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: Trunk F Pit
Lab ID: 1609323-002
Matrix: MEOH (SOIL)
Client Sample ID: Trunk F Pit South Wall
Collection Date: 9/7/2016 1:35:00 PM
Received Date: 9/8/2016 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/8/2016 10:47:02 AM	27403
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/8/2016 11:11:21 AM	27392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/8/2016 11:11:21 AM	27392
Surr: DNOP	112	70-130		%Rec	1	9/8/2016 11:11:21 AM	27392
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	53	4.3		mg/Kg	1	9/8/2016 11:43:37 AM	27376
Surr: BFB	338	68.3-144	S	%Rec	1	9/8/2016 11:43:37 AM	27376
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.021		mg/Kg	1	9/8/2016 11:43:37 AM	27376
Toluene	ND	0.043		mg/Kg	1	9/8/2016 11:43:37 AM	27376
Ethylbenzene	ND	0.043		mg/Kg	1	9/8/2016 11:43:37 AM	27376
Xylenes, Total	0.69	0.085		mg/Kg	1	9/8/2016 11:43:37 AM	27376
Surr: 4-Bromofluorobenzene	120	80-120		%Rec	1	9/8/2016 11:43:37 AM	27376

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: Trunk F Pit
Lab ID: 1609323-003 **Matrix:** MEOH (SOIL)

Client Sample ID: TRK F Pit East Wall
Collection Date: 9/7/2016 1:40:00 PM
Received Date: 9/8/2016 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/8/2016 10:59:26 AM	27403
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	29	10		mg/Kg	1	9/8/2016 11:32:59 AM	27392
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/8/2016 11:32:59 AM	27392
Surr: DNOP	113	70-130		%Rec	1	9/8/2016 11:32:59 AM	27392
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	1200	59		mg/Kg	20	9/8/2016 12:07:08 PM	27376
Surr: BFB	521	68.3-144	S	%Rec	20	9/8/2016 12:07:08 PM	27376
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.29		mg/Kg	20	9/8/2016 12:07:08 PM	27376
Toluene	ND	0.59		mg/Kg	20	9/8/2016 12:07:08 PM	27376
Ethylbenzene	ND	0.59		mg/Kg	20	9/8/2016 12:07:08 PM	27376
Xylenes, Total	22	1.2		mg/Kg	20	9/8/2016 12:07:08 PM	27376
Surr: 4-Bromofluorobenzene	135	80-120	S	%Rec	20	9/8/2016 12:07:08 PM	27376

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: Trunk F Pit
Lab ID: 1609323-004
Matrix: MEOH (SOIL)
Client Sample ID: TRK F Pit West Wall
Collection Date: 9/7/2016 1:45:00 PM
Received Date: 9/8/2016 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	45	30		mg/Kg	20	9/8/2016 11:11:50 AM	27403
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/8/2016 11:54:48 AM	27392
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/8/2016 11:54:48 AM	27392
Surr: DNOP	103	70-130		%Rec	1	9/8/2016 11:54:48 AM	27392
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	9/8/2016 12:54:18 PM	27376
Surr: BFB	91.4	68.3-144		%Rec	1	9/8/2016 12:54:18 PM	27376
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.021		mg/Kg	1	9/8/2016 12:54:18 PM	27376
Toluene	ND	0.041		mg/Kg	1	9/8/2016 12:54:18 PM	27376
Ethylbenzene	ND	0.041		mg/Kg	1	9/8/2016 12:54:18 PM	27376
Xylenes, Total	ND	0.083		mg/Kg	1	9/8/2016 12:54:18 PM	27376
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	9/8/2016 12:54:18 PM	27376

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: Trunk F Pit
Lab ID: 1609323-005
Matrix: MEOH (SOIL)
Client Sample ID: TRK 5 Pit Bottom
Collection Date: 9/7/2016 1:50:00 PM
Received Date: 9/8/2016 6:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	36	30		mg/Kg	20	9/8/2016 11:24:15 AM	27403
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/8/2016 12:16:34 PM	27392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/8/2016 12:16:34 PM	27392
Surr: DNOP	103	70-130		%Rec	1	9/8/2016 12:16:34 PM	27392
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	9/8/2016 1:17:46 PM	27376
Surr: BFB	94.7	68.3-144		%Rec	5	9/8/2016 1:17:46 PM	27376
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.10		mg/Kg	5	9/8/2016 1:17:46 PM	27376
Toluene	ND	0.20		mg/Kg	5	9/8/2016 1:17:46 PM	27376
Ethylbenzene	ND	0.20		mg/Kg	5	9/8/2016 1:17:46 PM	27376
Xylenes, Total	ND	0.40		mg/Kg	5	9/8/2016 1:17:46 PM	27376
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	5	9/8/2016 1:17:46 PM	27376

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#: **1609323**

09-Sep-16

Client: Williams Field Services

Project: Trunk F Pit

Sample ID	**MB-27403**	SampType:	**MBLK**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**PBS**	Batch ID:	**27403**		RunNo:	**37065**				
Prep Date:	**9/8/2016**	Analysis Date:	**9/8/2016**		SeqNo:	**1149778**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-27403**	SampType:	**LCS**		TestCode:	**EPA Method 300.0: Anions**				
Client ID:	**LCSS**	Batch ID:	**27403**		RunNo:	**37065**				
Prep Date:	**9/8/2016**	Analysis Date:	**9/8/2016**		SeqNo:	**1149779**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	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
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#: **1609323**

09-Sep-16

Client: Williams Field Services

Project: Trunk F Pit

Sample ID **LCS-27392**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27392**	RunNo: **37059**
Prep Date: **9/8/2016**	Analysis Date: **9/8/2016**	SeqNo: **1148917** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.6	62.6	124			
Surr: DNOP	5.0		5.000		99.1	70	130			

Sample ID **MB-27392**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27392**	RunNo: **37059**
Prep Date: **9/8/2016**	Analysis Date: **9/8/2016**	SeqNo: **1148918** 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		109	70	130			

Sample ID **1609323-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TRK-F Pit North Wal**	Batch ID: **27392**	RunNo: **37059**
Prep Date: **9/8/2016**	Analysis Date: **9/8/2016**	SeqNo: **1148989** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	85	9.4	47.04	40.14	95.2	33.9	141			
Surr: DNOP	4.9		4.704		103	70	130			

Sample ID **1609323-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TRK-F Pit North Wal**	Batch ID: **27392**	RunNo: **37059**
Prep Date: **9/8/2016**	Analysis Date: **9/8/2016**	SeqNo: **1148990** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	100	9.4	47.13	40.14	133	33.9	141	19.1	20	
Surr: DNOP	4.8		4.713		102	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#: **1609323**

09-Sep-16

Client: Williams Field Services

Project: Trunk F Pit

Sample ID **LCS-27376**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **27376**	RunNo: **37063**
Prep Date: **9/7/2016**	Analysis Date: **9/8/2016**	SeqNo: **1149497** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.1	80	120			
Surr: BFB	950		1000		95.4	68.3	144			

Sample ID **MB-27376**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **27376**	RunNo: **37063**
Prep Date: **9/7/2016**	Analysis Date: **9/8/2016**	SeqNo: **1149498** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		87.6	68.3	144			

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#: **1609323**

09-Sep-16

Client: Williams Field Services

Project: Trunk F Pit

Sample ID **LCS-27376**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **27376**	RunNo: **37063**
Prep Date: **9/7/2016**	Analysis Date: **9/8/2016**	SeqNo: **1149514** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.025	1.000	0	77.3	75.3	123			
Toluene	0.92	0.050	1.000	0	92.1	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	102	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	80	120			

Sample ID **MB-27376**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **27376**	RunNo: **37063**
Prep Date: **9/7/2016**	Analysis Date: **9/8/2016**	SeqNo: **1149515** 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	1.1		1.000		105	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
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: **1609323** RcptNo: **1**

Received by/date: AG 09/08/16

Logged By: **Ashley Gallegos** **9/8/2016 6:30:00 AM** AG

Completed By: **Ashley Gallegos** **9/8/2016 7:02:47 AM** AG

Reviewed By: AT 09/08/16

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?	Client		

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	2.9	Good	Yes			

Chain-of-Custody Record

ent: WFS

iling Address: 188 CR4900

3loom Field NM 87413

one #: 505-215-7274

ail or Fax#: michael.HANNAN@williams.com

/QC Package:

Standard ☐ Level 4 (Full Validation)

creditation

NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time: Same Day

☐ Standard ☑ Rush 9-8-2016

Project Name: TRUNK F ~~F~~ pit

Project #:

Project Manager: michael HANNAN

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 2.9

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. 1609333	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)
9/6	[redacted]	soil	TRK-F pit North wall	1-402	Cool	-001	X		X									X				
9/6	1:35	soil	TRUNK F Pit South wall	1-402		-002	X		X									X				
9/6	1:40	soil	TRK-F pit East wall	1-402		-003	X		X									X				
9/6	1:45	soil	TRK-F pit West wall	1-402		-004	X		X									X				
9/6	1:50	soil	TRK-F Bottom pit	1-402		-005	X		X									X				

Date	Time	Relinquished by:	Received by:	Date	Time
9/6	1600	Morgan Killion	Christine Walker	9/7/16	1600
9/7/16	1907	Christine Walker		09/08/16	0830

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

September 20, 2016

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

RE: Trunk-F OrderNo.: 1609953

Dear Michael Hannan:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/17/2016 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 **1609953**
Date Reported: **9/20/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk-F
Lab ID: 1609953-001
Matrix: MEOH (SOIL)
Client Sample ID: TRK-F East Wall
Collection Date: 9/16/2016 11:30:00 AM
Received Date: 9/17/2016 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	9/19/2016 10:03:03 AM	27559
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/19/2016 10:03:03 AM	27559
Surr: DNOP	96.9	70-130		%Rec	1	9/19/2016 10:03:03 AM	27559
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/19/2016 11:04:37 AM	G37293
Surr: BFB	80.6	68.3-144		%Rec	1	9/19/2016 11:04:37 AM	G37293
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	9/19/2016 11:04:37 AM	B37293
Toluene	ND	0.040		mg/Kg	1	9/19/2016 11:04:37 AM	B37293
Ethylbenzene	ND	0.040		mg/Kg	1	9/19/2016 11:04:37 AM	B37293
Xylenes, Total	ND	0.079		mg/Kg	1	9/19/2016 11:04:37 AM	B37293
Surr: 4-Bromofluorobenzene	96.5	80-120		%Rec	1	9/19/2016 11:04:37 AM	B37293

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#: **1609953**

20-Sep-16

Client: Williams Field Services

Project: Trunk-F

Sample ID **LCS-27559**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27559**	RunNo: **37287**
Prep Date: **9/19/2016**	Analysis Date: **9/19/2016**	SeqNo: **1157753** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.0	62.6	124			
Surr: DNOP	4.8		5.000		95.9	70	130			

Sample ID **MB-27559**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27559**	RunNo: **37287**
Prep Date: **9/19/2016**	Analysis Date: **9/19/2016**	SeqNo: **1157754** 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	9.9		10.00		99.0	70	130			

Sample ID **1609953-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TRK-F East Wall**	Batch ID: **27559**	RunNo: **37287**
Prep Date: **9/19/2016**	Analysis Date: **9/19/2016**	SeqNo: **1157794** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.3	46.73	0	91.5	33.9	141			
Surr: DNOP	4.6		4.673		98.9	70	130			

Sample ID **1609953-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **TRK-F East Wall**	Batch ID: **27559**	RunNo: **37287**
Prep Date: **9/19/2016**	Analysis Date: **9/19/2016**	SeqNo: **1157795** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	49.95	0	91.1	33.9	141	6.16	20	
Surr: DNOP	4.8		4.995		96.5	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#: **1609953**

20-Sep-16

Client: Williams Field Services

Project: Trunk-F

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G37293**	RunNo: **37293**
Prep Date:	Analysis Date: **9/19/2016**	SeqNo: **1158400** 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	870		1000		87.0	68.3	144			

Sample ID **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G37293**	RunNo: **37293**
Prep Date:	Analysis Date: **9/19/2016**	SeqNo: **1158401** 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	99.1	74.6	123			
Surr: BFB	910		1000		91.0	68.3	144			

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#: **1609953**

20-Sep-16

Client: Williams Field Services

Project: Trunk-F

Sample ID **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B37293**	RunNo: **37293**
Prep Date:	Analysis Date: **9/19/2016**	SeqNo: **1158418** 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	1.1		1.000		108	80	120			

Sample ID **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B37293**	RunNo: **37293**
Prep Date:	Analysis Date: **9/19/2016**	SeqNo: **1158419** 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	104	75.3	123			
Toluene	1.0	0.050	1.000	0	103	80	124			
Ethylbenzene	1.0	0.050	1.000	0	101	82.8	121			
Xylenes, Total	3.0	0.10	3.000	0	101	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	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
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: 1609963 RcptNo: 1

Received by/date: 09/17/16
Logged By: Lindsay Mangin 9/17/2016 8:00:00 AM
Completed By: Lindsay Mangin 9/17/2016 8:44:18 AM
Reviewed By: LC 09/17/16

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 ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
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 ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
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	4.7	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 188 CR 4900

Phone #: 505-632-4807

email or Fax#: michael.HANNAN@williams.com

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

Accreditation: NELAP ☐ Other

EDD (Type)

Turn-Around Time: Same Day

☐ Standard ☑ Rush 9-19-16

Project Name: TRUNK-F

Project #:

Project Manager: Michael HANNAN

Sampler: Morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.7

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. 1609953	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)
9/16	11:30	Soil	TRK-F East Wall	1-4oz	Cool	-001	X		X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/16	1400	Morgan Killion	Chad Walt	9/16/16	1400
9/16	1800	Chad Walt		09/17/16	0800

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

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., Bloomfield, NM 87413**	Telephone No. **505-632-4475**
Facility Name **31-6 CDP**	Facility Type **Compressor Station**

Surface Owner **BLM**	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
N	**1**	**30N**	**6W**					**Rio Arriba**

Latitude 36.83592 Longitude -107.42001

NATURE OF RELEASE

Type of Release **Natural Gas**	Volume of Release **1,156 MCF Natural Gas**	Volume Recovered **0 MCF**
Source of Release **Facility inlet flange.**	Date and Hour of Occurrence **12/7/2016, 11:00 AM MST**	Date and Hour of Discovery **12/7/2016, 11:00 AM MST**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Cory Smith was notified via telephone**	
By Whom? **Kijun Hong**	Date and Hour **12/7/2016, 2:56 PM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

If a Watercourse was Impacted, Describe Fully.*

N/A

OIL CONS. DIV DIST. 3
DEC 15 2016

Describe Cause of Problem and Remedial Action Taken.*

Flange gasket froze and failed causing a leak.

Describe Area Affected and Cleanup Action Taken.*

No cleanup required as gas was released 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
Printed Name: **Kijun Hong**	Approved by Environmental Specialist:
Title: **Environmental Specialist**	Approval Date: 1/6/2017 Expiration Date:
E-mail Address: Kijun.Hong@williams.com	Conditions of Approval: NCS1634253647 Attached ☐
Date: **12/12/0216** Phone: **505-632-4475**	

* Attach Additional Sheets If Necessary

(1)

District I
1625 N. French Dr., Hobbs, NM 88240
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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., Bloomfield, NM 87413**	Telephone No. **505-632-4475**
Facility Name **31-6 CDP**	Facility Type **Compressor Station**

Surface Owner **BLM**	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
N	**1**	**30N**	**6W**					**Rio Arriba**

Latitude 36.83592 Longitude -107.42001

NATURE OF RELEASE

Type of Release **Natural Gas**	Volume of Release **3,943 MCF Natural Gas**	Volume Recovered **0 MCF**
Source of Release **Facility Pressure Safety Valve (PSV)**	Date and Hour of Occurrence **11/29/2016, 03:00 AM MST**	Date and Hour of Discovery **11/29/2016, 12:58 PM MST**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Cory Smith**	
By Whom? **Kijun Hong**	Date and Hour **11/29/2016, 3:35 PM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **N/A**	

OIL CONS. DIV DIST. 3

DEC 15 2016

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

Downstream facility was shut in causing pressure buildup along the pipeline. This caused the PSV to activate as designed, releasing natural gas to atmosphere. No liquids were released and no soil impacted.

Describe Area Affected and Cleanup Action Taken.*

No soil was impacted.

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
Printed Name: **Kijun Hong**	Approved by Environmental Specialist:
Title: **Environmental Specialist**	Approval Date: 11/6/2017 Expiration Date:
E-mail Address: Kijun.Hong@williams.com	Conditions of Approval: NVF1700639772 Attached ☐
Date: **12/12/2016** Phone: **505-632-4475**	

* Attach Additional Sheets If Necessary

(1)

District I
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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 Mitch Morris
Address 1755 Arroyo Drive	Telephone No. 505-632-4708
Facility Name Trunk S Pipeline	Facility Type Pipeline

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
B	19	26N	3W					Rio Arriba

Latitude 36.477777° N **Longitude** -107.1833333° W

NATURE OF RELEASE

Type of Release Natural Gas/Produced Water	Volume of Release 42461.82 MCF/200 gallons	Volume Recovered 0 MCF/200 gallons
Source of Release Pipeline break	Date and Hour of Occurrence 09/14/2016, 9:15 AM MST	Date and Hour of Discovery 09/14/2016, 9:15 AM MST
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Cory Smith via Telephone voicemail	
By Whom? Mitch Morris	Date and Hour 09/14/2016 2:13 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

OIL CONS. DIV DIST. 3
OCT 13 2016

If a Watercourse was Impacted, Describe Fully.*

N/A

Describe Cause of Problem and Remedial Action Taken.*

A pipeline leak was identified by a third party. Williams personnel isolated and de-pressurized the line as soon as possible. The pipeline has been excavated and repairs are planned for 09/21/2016.

Describe Area Affected and Cleanup Action Taken.*
Repair of the pipeline is scheduled for 09/21/2016. Produced water impacted soil has been excavated and will be disposed of at an approved NMOCD facility. Remediation confirmation samples were obtained today and were sent to a laboratory for analysis.
FINAL C-141 Update, 10/07/2016: The pipeline has been repaired and impacted soil has been removed from the excavation for disposal at an NMOCD approved landfarm.

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: 11/6/2017 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: NVF1626539638 Attached ☐
Date: 10/07/2016 Phone: 505-632-4708	

* Attach Additional Sheets If Necessary

11

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 23, 2016

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

RE: Trunk Line S Line Leak OrderNo.: 1609B50

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/21/2016 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 **1609B50**
Date Reported: **9/23/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Trunk Line S Line Leak
Lab ID: 1609B50-001 **Matrix:** MEOH (SOIL)

Client Sample ID: Trunk S Line Sidewall
Collection Date: 9/20/2016 1:40:00 PM
Received Date: 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	9/21/2016 12:00:00 PM	27625
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/21/2016 10:53:48 AM	27630
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	9/21/2016 11:56:00 AM	M37365
Surr: BFB	101	70-130		%Rec	1	9/21/2016 11:56:00 AM	M37365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/21/2016 9:59:48 AM	27624
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2016 9:59:48 AM	27624
Surr: DNOP	97.0	70-130		%Rec	1	9/21/2016 9:59:48 AM	27624
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	ND	0.020		mg/Kg	1	9/21/2016 11:56:00 AM	S37365
Toluene	ND	0.040		mg/Kg	1	9/21/2016 11:56:00 AM	S37365
Ethylbenzene	ND	0.040		mg/Kg	1	9/21/2016 11:56:00 AM	S37365
Xylenes, Total	ND	0.079		mg/Kg	1	9/21/2016 11:56:00 AM	S37365
Surr: 1,2-Dichloroethane-d4	98.6	70-130		%Rec	1	9/21/2016 11:56:00 AM	S37365
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	9/21/2016 11:56:00 AM	S37365
Surr: Dibromofluoromethane	107	70-130		%Rec	1	9/21/2016 11:56:00 AM	S37365
Surr: Toluene-d8	94.9	70-130		%Rec	1	9/21/2016 11:56:00 AM	S37365

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: Trunk Line S Line Leak
Lab ID: 1609B50-002 **Matrix:** MEOH (SOIL)

Client Sample ID: Trunk S Line Bottom Comp
Collection Date: 9/20/2016 1:45:00 PM
Received Date: 9/21/2016 7:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH						Analyst: **MAB**	
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	9/21/2016 12:00:00 PM	27625
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	9/21/2016 11:06:13 AM	27630
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **AG**	
Gasoline Range Organics (GRO)	5.8	3.4		mg/Kg	1	9/21/2016 12:24:53 PM	M37365
Surr: BFB	104	70-130		%Rec	1	9/21/2016 12:24:53 PM	M37365
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/21/2016 10:21:32 AM	27624
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/21/2016 10:21:32 AM	27624
Surr: DNOP	96.8	70-130		%Rec	1	9/21/2016 10:21:32 AM	27624
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **AG**	
Benzene	0.022	0.017		mg/Kg	1	9/21/2016 12:24:53 PM	S37365
Toluene	0.13	0.034		mg/Kg	1	9/21/2016 12:24:53 PM	S37365
Ethylbenzene	ND	0.034		mg/Kg	1	9/21/2016 12:24:53 PM	S37365
Xylenes, Total	0.36	0.068		mg/Kg	1	9/21/2016 12:24:53 PM	S37365
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	9/21/2016 12:24:53 PM	S37365
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	9/21/2016 12:24:53 PM	S37365
Surr: Dibromofluoromethane	105	70-130		%Rec	1	9/21/2016 12:24:53 PM	S37365
Surr: Toluene-d8	94.4	70-130		%Rec	1	9/21/2016 12:24:53 PM	S37365

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#: **1609B50**

23-Sep-16

Client: Williams Field Services

Project: Trunk Line S Line Leak

Sample ID	**MB-27630**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**27630**	RunNo:	**37376**					
Prep Date:	**9/21/2016**	Analysis Date:	**9/21/2016**	SeqNo:	**1161518**	Units:	**mg/Kg**			

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

Sample ID	**LCS-27630**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**27630**	RunNo:	**37376**					
Prep Date:	**9/21/2016**	Analysis Date:	**9/21/2016**	SeqNo:	**1161520**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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#: **1609B50**

23-Sep-16

Client: Williams Field Services

Project: Trunk Line S Line Leak

Sample ID **MB-27625**	SampType: **MBLK**	TestCode: **EPA Method 418.1: TPH**
Client ID: **PBS**	Batch ID: **27625**	RunNo: **37367**
Prep Date: **9/21/2016**	Analysis Date: **9/21/2016**	SeqNo: **1160961** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID **LCS-27625**	SampType: **LCS**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS**	Batch ID: **27625**	RunNo: **37367**
Prep Date: **9/21/2016**	Analysis Date: **9/21/2016**	SeqNo: **1160962** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	109	80.7	121			

Sample ID **LCSD-27625**	SampType: **LCSD**	TestCode: **EPA Method 418.1: TPH**
Client ID: **LCSS02**	Batch ID: **27625**	RunNo: **37367**
Prep Date: **9/21/2016**	Analysis Date: **9/21/2016**	SeqNo: **1160963** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	110	80.7	121	1.26	20	

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#: **1609B50**

23-Sep-16

Client: Williams Field Services

Project: Trunk Line S Line Leak

Sample ID **LCS-27624**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27624**	RunNo: **37357**
Prep Date: **9/21/2016**	Analysis Date: **9/21/2016**	SeqNo: **1160681** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.0	62.6	124			
Surr: DNOP	4.7		5.000		93.9	70	130			

Sample ID **MB-27624**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27624**	RunNo: **37357**
Prep Date: **9/21/2016**	Analysis Date: **9/21/2016**	SeqNo: **1160682** 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	9.8		10.00		98.0	70	130			

Sample ID **LCS-27605**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **27605**	RunNo: **37357**
Prep Date: **9/20/2016**	Analysis Date: **9/21/2016**	SeqNo: **1161362** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		86.9	70	130			

Sample ID **MB-27605**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **27605**	RunNo: **37357**
Prep Date: **9/20/2016**	Analysis Date: **9/21/2016**	SeqNo: **1161363** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.9	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
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#: **1609B50**

23-Sep-16

Client: Williams Field Services

Project: Trunk Line S Line Leak

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **S37365**	RunNo: **37365**
Prep Date:	Analysis Date: **9/21/2016**	SeqNo: **1160917** 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	104	70	130			
Toluene	0.93	0.050	1.000	0	92.7	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.7	70	130			
Surr: Toluene-d8	0.49		0.5000		98.0	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **S37365**	RunNo: **37365**
Prep Date:	Analysis Date: **9/21/2016**	SeqNo: **1160918** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.1	70	130			
Surr: Dibromofluoromethane	0.50		0.5000		99.6	70	130			
Surr: Toluene-d8	0.49		0.5000		97.5	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
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#: **1609B50**

23-Sep-16

Client: Williams Field Services

Project: Trunk Line S Line Leak

Sample ID **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS**	Batch ID: **M37365**	RunNo: **37365**
Prep Date:	Analysis Date: **9/21/2016**	SeqNo: **1160923** 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	95.2	62.9	123			
Surr: BFB	500		500.0		100	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS**	Batch ID: **M37365**	RunNo: **37365**
Prep Date:	Analysis Date: **9/21/2016**	SeqNo: **1160924** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	490		500.0		97.3	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
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

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: 1609B50 RcptNo: 1

Received by/date: 09/21/16

Logged By: Lindsay Mangin 9/21/2016 7:45:00 AM

Completed By: Lindsay Mangin 9/21/2016 8:30:42 AM

Reviewed By: 09/21/16

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 ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

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

Adjusted? _____

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	1.8	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 188 CR4900
Bloom Field NM 87413

Phone #: 505-632-4708

email or Fax#: mitch.morris@williams.com

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

Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time: Same day
☐ Standard ☑ Rush 9-21-16

Project Name: TRUNK S. LINE leak

Project #:

Project Manager: mitch morris

Sampler: morgan Killion

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.8

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 1609350	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)
20/16	1:40	Soil	TRUNK S LINE Sidewall	1-402	Cool	-001	X		X	X								X				
20/16	1:45	Soil	TRUNK S LINE Bottom comp.	1-402	Cool	-002	X		X	X								X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
20/16	1615	Morgan Killion	Chad Weeks	9/20/16	1615
20/16	2014	Chad Weeks		09/21/16	0745

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

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 Michael Hannan, PE
Address 1755 Arroyo Dr., Bloomfield, NM 87413	Telephone No. 505-632-4807
Facility Name Blanco Compressor Station	Facility Type Compressor Station

Surface Owner BLM	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
K	32	30N	9W					San Juan

Latitude 36.767392 N **Longitude** -107.804754 W

NATURE OF RELEASE

Type of Release Condensate	Volume of Release 10 bbls	Volume Recovered 0 bbls
Source of Release Storage vessel	Date and Hour of Occurrence Estimated 4/6/2016 4:30 PM MT	Date and Hour of Discovery Estimated 4/6/2016 5:00 PM MT
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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
NOV 10 2016

Describe Cause of Problem and Remedial Action Taken.*
On 4/6/16 in the morning, Williams' employees were pigging three 10" lines that feed Blanco Compressor Station. By 4:00 pm all of the pigging was complete. At 4:57 pm a contract truck driver noticed that one of stations condensate tanks was overflowing. The contract truck driver contacted Williams and a Williams' employee responded and quickly switched the flow of condensate from tank 4246 to 4245 to stop the tank from overflowing. A root cause analysis was conducted and several resulting action items have been implemented to help prevent a future re-occurrence.

Describe Area Affected and Cleanup Action Taken.*
The condensate was contained within the secondary containment area around the tanks. During excavation of impacted soil, evidence of historical contamination was observed. It was determined that a larger project would ensue for which detailed planning would be required. This eventually included moving one condensate tank out of the primary secondary containment and into a new temporary secondary containment. Renewed excavation work began on Friday October 21, 2016, and continued through Friday October 28, 2016, upon which time samples were collected and sent for laboratory analyses. The laboratory results were received on Monday October 31, 2016, and are attached. The remediation site's risk ranking is 10, based on the NMOCD's Guidelines for Remediation of Leaks, Spills and Releases (dated August 13, 1993). See attached for the siting criteria and documentation of the risk ranking. The analytical results demonstrate that the remediation action levels were achieved.

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
Printed Name: Michael Hannan	Approved by Environmental Specialist:
Title: Engineer, Sr.	Approval Date: 11/6/2017 Expiration Date:
E-mail Address: Michael.Hannan@williams.com	Conditions of Approval: Attached ☐
Date: November 7, 2016 Phone: 505-632-4807	NVF1613132460

* Attach Additional Sheets If Necessary

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SITING CRITERIA
SUMMARY INFORMATION SHEET
19.15.17.10 NMAC

LT Environmental Inc.
2243 Main Avenue, Suite 3
Durango, Colorado 81301
T 970-385-1096

GENERAL INFORMATION

Site Name:	Blanco Compressor Station	**Operator:**	Williams Four Corners LLC
Pit Identifier:	BGT 1	**Date**	4/27/2015
		Prepared by:	LT Environmental, Inc.

GENERAL SITE LOCATION INFORMATION

Geologic Formation: Nacimiento **SEC:** 32 **TWN:** T30N **RNG:** R6W
Soil Type: Haplargids-Blackston-Torriorthents c **Latitude:** 36.766607 **Longitude:** -107.804546
Annual Precipitation: Bloomfield 8.71"

GENERAL SITING CRITERIA

Is groundwater less than 25 feet below the bottom of below grade tank? - No

See Figure 3 and attached iWaters Data

BELOW GRADE TANK SITING CRITERIA

Within 100 feet of a continuously flowing watercourse? - No See Figure 1
The San Juan River is 1.52 miles to the south

Within 100 feet of a significant watercourse? - No See Figure 1 and Figure 3
A first order tributary of the San Juan River is 732 feet to the southwest

Within 100 feet of a lakebed, playa lake, or sinkhole? - No See Figure 2
N/A

Within 200 horizontal feet of a spring or a freshwater well used for public or livestock consumption? - No See Figure 3 and attached iWaters data
The closest water well (SJ 03118) is located approximately 3,381 feet southeast of the below-grade tank. Water well SJ 03490 is located 4,472 feet southeast of the below-grade tank.

ATTACHED DOCUMENTS:

Hydrogeologic Report
Figure 1: Topographic Map
Figure 2: Aerial Photograph
Figure 3: Water Well and Surface Water Features
iWaters Data

ADDITIONAL COMMENTS:

COMPLIANCE / ENGINEERING / REMEDIATION

LT Environmental Inc.

2243 Main Avenue, Suite 3
Durango, Colorado 81301
T 970.385.1096 / F 970.385.1873

Blanco Compressor Station
Hydrogeologic Report for Siting Criteria

General Geology and Hydrology

The San Juan Basin is a typical Rocky Mountain basin with a gently dipping southern flank and a steeply dipping northern flank. Asymmetrically layered Tertiary sandstones and shales, along with Quaternary alluvial deposits, dominate surficial geology (Dane and Bachman, 1965). The below-grade tank is located in Mansfield Canyon, northeast of Blanco, New Mexico. The Nacimiento Formation of Tertiary age is exposed, along with Quaternary alluvial and aeolian sands within dry washes and arroyos.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits, serve as the primary aquifers in the San Juan Basin. In most of the area, the Nacimiento Formation lies at the surface. Thickness of the Nacimiento ranges from 418 feet to 2,232 feet, aquifers within the coarser and continuous sandstone bodies are between 0 feet and 1,000 feet deep in this section of the San Juan Basin (Stone et al., 1983). Groundwater within these aquifers flows toward the nearby San Juan River and its tributaries.

The prominent soil type at the below-ground grade tank are entisols, which are defined as soils that do not show any profile development. Soils are basically unaltered from their parent rock. Miles of arroyos, washes, and intermittent streams exist as part of the drainage network toward the San Juan River (www.emnrd.state.nm.us). These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes soils that cover the area.

Dry and arid weather further prohibit active recharge. The climate of the region is arid, averaging just over 8.71 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center www.wrcc.dri.edu). The predominant vegetation are sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

Site-Specific Hydrogeology

Depth to groundwater is estimated to be greater than 100 feet beneath the bottom of the below-grade tank. This estimation is based on data from Stone et al. (1983), the United States Geological Survey (USGS) *Groundwater Atlas of the United States*. Additionally, local

topography and proximity to surface hydrologic features are taken into consideration. When available, permitted water well logs and cathodic protection well logs are referenced to infer depth to groundwater near the site.

Local aquifers include sandstones within the Nacimiento Formation, which range from 0 feet to 1,000 feet below ground surface in this area, as well as shallow aquifers within Quaternary alluvial deposits (Stone et al., 1983). The 1,000-foot depth range for Nacimiento aquifers covers an area greater than 20 miles wide in the central San Juan Basin and depth decreases toward the margins of the San Juan Basin.

The below-grade tank is located next to Manfield Canyon where it empties into the San Juan River. Regional topography is composed of mesas dissected by narrow canyons and arroyos. The mesas are composed of cliff-forming sandstone, and systems of dry washes and their tributaries composed of alluvium are evident on the attached aerial image. The below-grade tank is located on a sandstone mesa at an elevation of approximately 5,766 feet and 1.42 miles north of the San Juan River.

Groundwater data available from the New Mexico State Engineer's iWaters database for wells near the below-grade tank are attached. Groundwater data are sparse in this region; the nearest iWaters data point is well number SJ 03490 located within Mansfield Canyon and greater than 0.75 miles to the southeast. Depth to groundwater in the permitted water well is 20 feet below ground surface. An elevation difference between the well and the below-ground tank of approximately 115 feet and the elevation difference between the below-grade tank and the San Juan River of approximately 200 feet suggests that depth to groundwater is greater than 100 feet below the bottom of the below-grade tank.

References

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Dick-Peddie, W.A., 1993, *New Mexico Vegetation – Past, Present and Future*: Albuquerque, New Mexico, University of New Mexico Press, 244 p.

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USGS, Groundwater Atlas of the United States: Arizona, Colorado, New Mexico, Utah, HA 730-C: (http://www.pubs.usgs.gov).

Western Region Climate Center, 2008, New Mexico climate summaries: Desert Research Institute at http://www.wrcc.dri.edu/summary/climsmnm.html.

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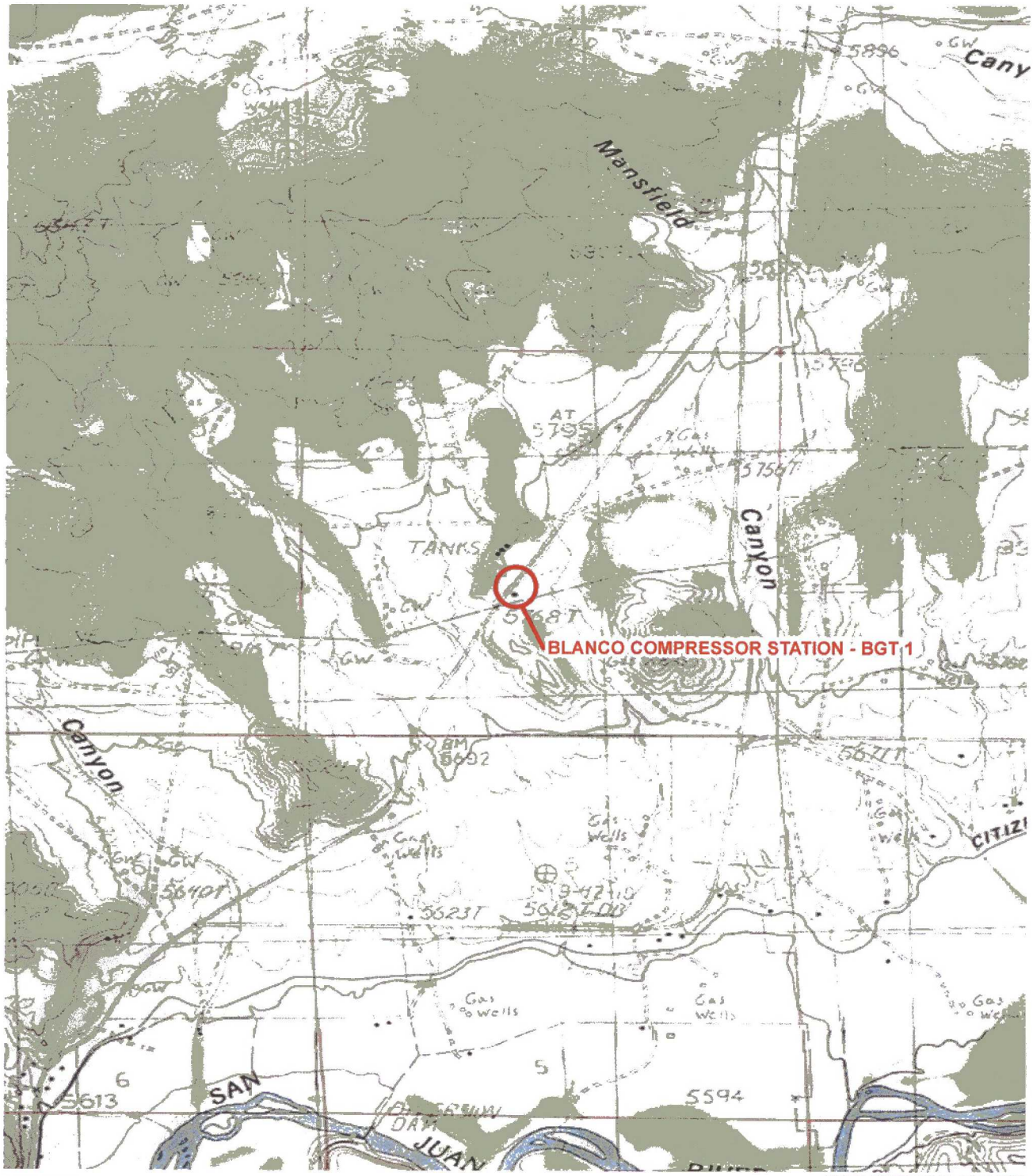

LEGEND

SITE LOCATION

BGT: BELOW GRADE TANK

IMAGE COURTESY OF ESRI/USGS

0 2,000 4,000

Feet

N

FIGURE 1
TOPOGRAPHIC MAP
BLANCO COMPRESSOR STATION - BGT 1
NESW (K) SEC 32 T30N R9W
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS

P:\Williams Four Corners\GIS\MXD\034014012_PIT_PERMITS\034014012_PIT PERMIT MAPBOOK FIG01 TOPO.mxd

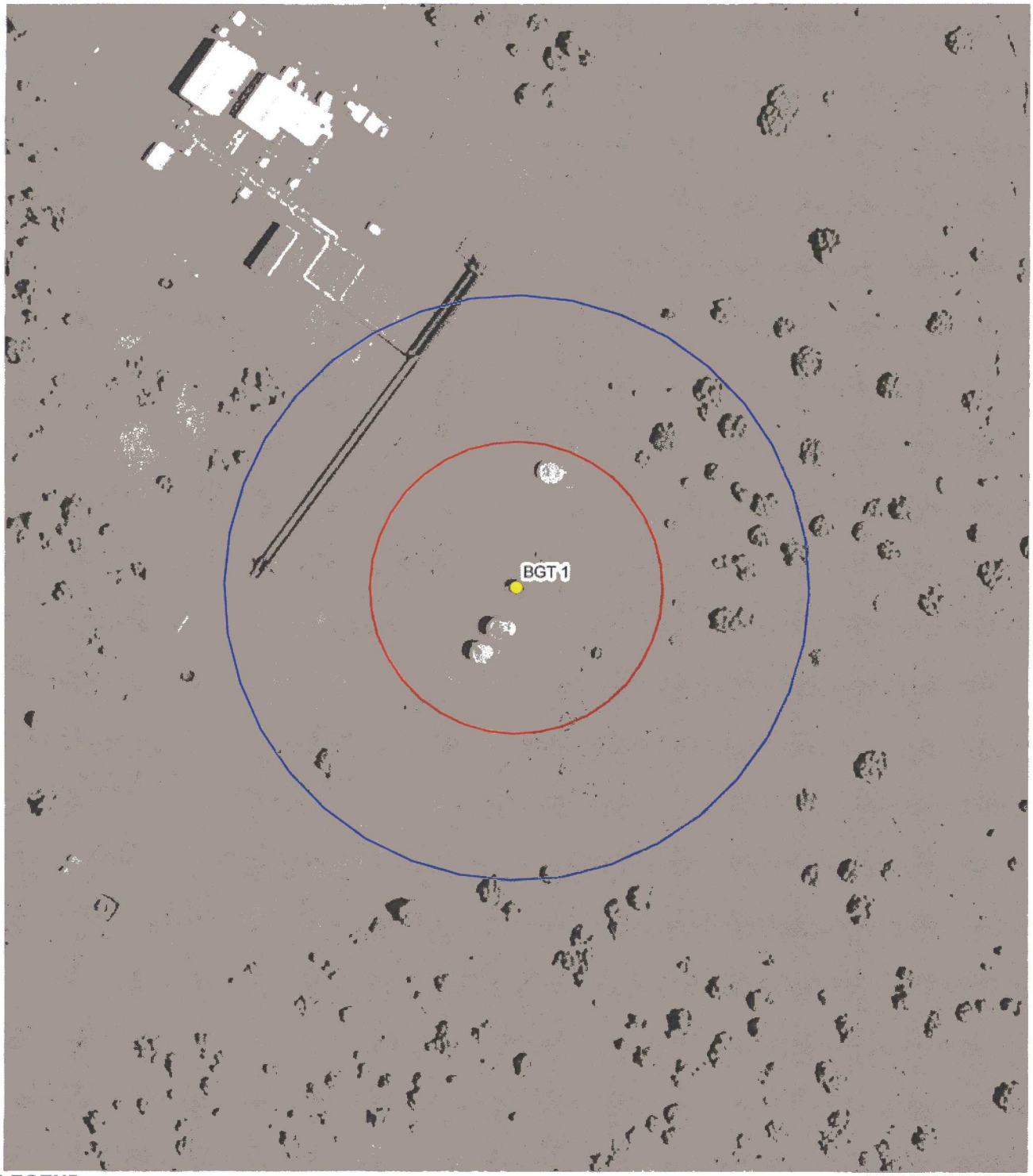

IMAGE COURTESY OF ESRI

LEGEND

- BGT: BELOW GRADE TANK
- 100-FOOT RADIUS
- 200-FOOT RADIUS

0 100 200

Feet

N

FIGURE 2
AERIAL PHOTOGRAPHIC MAP
BLANCO COMPRESSOR STATION - BGT 1
NESW (K) SEC 32 T30N R9W
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS

P:\Williams Four Corners\GIS\MXD\034014012_PIT_PERMITS\034014012_PIT PERMIT MAPBOOK FIG02 AERIAL.mxd

FIGURE 3
WATER WELL MAP
BLANCO COMPRESSOR STATION - BGT 1
NESW (K) SEC 32 T30N R9W
SAN JUAN COUNTY, NEW MEXICO
WILLIAMS FOUR CORNERS

P:\GIS\MXD\XTO1006 PIT PERMIT NM\PIT PERMIT MAPBOOK FIG04 WW.mxd

New Mexico Office of the State Engineer
Wells with Well Log Information

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(in feet)

POD Number	POD Code	POD Subbasin	County	Source	q q q 6416	4	Sec	Twn	Rng	X	Y	Start Date	Finish Date	Log File Date	Depth Well	Depth Water	Driller	License Number
SJ 02554			SJ	Shallow	4	1 2	04	29N	09W	251664	4071674*	10/10/1976	10/12/1976	03/24/1995	13	5	SELF	
SJ 03092			SJ	Shallow	1	1 4	05	29N	09W	249875	4071132*	07/03/2001	07/03/2001	07/19/2001	40	16	HARGIS, BILL	1508
SJ 03182			SJ	Shallow	1	1 4	05	29N	09W	249875	4071132*	09/21/2002	09/23/2002	09/29/2002	42	18		717
SJ 03466			SJ	Shallow	3	1 2	04	29N	09W	251464	4071674*	05/28/2004	05/31/2004	06/07/2004	40			799
SJ 03490			SJ	Shallow	3	1 1	04	29N	09W	250658	4071702*	02/10/2005	02/10/2005	02/18/2005	42	20		1479
SJ 03491			SJ	Shallow	3	1 2	04	29N	09W	251370	4071680			02/19/2010	54		CHIVERS	
SJ 03599			SJ	Shallow	1	1 4	05	29N	09W	249875	4071132*	04/22/2005	04/22/2005	05/02/2005	42	20	GILES, DEE III	1479

Record Count: 7

PLSS Search:

Section(s): 4, 5 **Township:** 29N **Range:** 09W

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

Ranking Score Determination
Site Name Blanco CS
Legal (Unit, Sec, Twn, Rng) S32 T30N R6W
GPS Coordinates 36.766607, -107.804546

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: LTE report >100 feet

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: LTE report no sources with 1,000 ft

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: LTE report 732 feet to 1st order tributary

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 (print and sign) Matt Webre
Date 10/31/16

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

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 31, 2016

Mike Hannan
Williams Field Services
188 Co. Rd 4900
Bloomfield, NM 87413
TEL:
FAX

RE: Blanco Tanks OrderNo.: 1610E03

Dear Mike Hannan:

Hall Environmental Analysis Laboratory received 9 sample(s) on 10/28/2016 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 **1610E03**
Date Reported: **10/31/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Blanco Tanks
Lab ID: 1610E03-001 **Matrix:** SOIL

Client Sample ID: Bottom Comp
Collection Date: 10/27/2016 2:00:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 10:32:01 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	18	9.2		mg/Kg	1	10/28/2016 9:57:26 AM	28348
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/28/2016 9:57:26 AM	28348
Surr: DNOP	90.8	70-130		%Rec	1	10/28/2016 9:57:26 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	260	38		mg/Kg	10	10/28/2016 12:38:49 PM	28328
Surr: BFB	115	68.3-144		%Rec	10	10/28/2016 12:38:49 PM	28328
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	0.19	0.19		mg/Kg	10	10/28/2016 12:38:49 PM	28328
Toluene	2.8	0.38		mg/Kg	10	10/28/2016 12:38:49 PM	28328
Ethylbenzene	0.62	0.38		mg/Kg	10	10/28/2016 12:38:49 PM	28328
Xylenes, Total	7.8	0.75		mg/Kg	10	10/28/2016 12:38:49 PM	28328
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	10	10/28/2016 12:38:49 PM	28328

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: Blanco Tanks
Lab ID: 1610E03-002 **Matrix:** SOIL

Client Sample ID: South Wall E- End
Collection Date: 10/27/2016 2:05:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 10:44:26 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/28/2016 10:19:13 AM	28348
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/28/2016 10:19:13 AM	28348
Surr: DNOP	93.9	70-130		%Rec	1	10/28/2016 10:19:13 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	16	4.0		mg/Kg	1	10/28/2016 11:51:30 AM	28328
Surr: BFB	135	68.3-144		%Rec	1	10/28/2016 11:51:30 AM	28328
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	10/28/2016 11:51:30 AM	28328
Toluene	ND	0.040		mg/Kg	1	10/28/2016 11:51:30 AM	28328
Ethylbenzene	ND	0.040		mg/Kg	1	10/28/2016 11:51:30 AM	28328
Xylenes, Total	0.59	0.080		mg/Kg	1	10/28/2016 11:51:30 AM	28328
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	1	10/28/2016 11:51:30 AM	28328

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: Blanco Tanks
Lab ID: 1610E03-003 **Matrix:** SOIL

Client Sample ID: South Wall W - End
Collection Date: 10/27/2016 2:10:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 10:56:51 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	10/28/2016 10:40:52 AM	28348
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/28/2016 10:40:52 AM	28348
Surr: DNOP	94.4	70-130		%Rec	1	10/28/2016 10:40:52 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	8.3	4.0		mg/Kg	1	10/28/2016 12:15:12 PM	28328
Surr: BFB	136	68.3-144		%Rec	1	10/28/2016 12:15:12 PM	28328
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	10/28/2016 12:15:12 PM	28328
Toluene	ND	0.040		mg/Kg	1	10/28/2016 12:15:12 PM	28328
Ethylbenzene	ND	0.040		mg/Kg	1	10/28/2016 12:15:12 PM	28328
Xylenes, Total	ND	0.079		mg/Kg	1	10/28/2016 12:15:12 PM	28328
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	10/28/2016 12:15:12 PM	28328

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: Blanco Tanks
Lab ID: 1610E03-004 **Matrix:** SOIL

Client Sample ID: East Wall N - End
Collection Date: 10/27/2016 2:15:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 11:09:16 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/28/2016 11:02:44 AM	28348
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/28/2016 11:02:44 AM	28348
Surr: DNOP	93.9	70-130		%Rec	1	10/28/2016 11:02:44 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	10/28/2016 10:22:27 AM	SG3830
Surr: BFB	86.7	68.3-144		%Rec	1	10/28/2016 10:22:27 AM	SG3830
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	10/28/2016 10:22:27 AM	SB3830
Toluene	ND	0.045		mg/Kg	1	10/28/2016 10:22:27 AM	SB3830
Ethylbenzene	ND	0.045		mg/Kg	1	10/28/2016 10:22:27 AM	SB3830
Xylenes, Total	ND	0.090		mg/Kg	1	10/28/2016 10:22:27 AM	SB3830
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	10/28/2016 10:22:27 AM	SB3830

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: Blanco Tanks
Lab ID: 1610E03-005 **Matrix:** SOIL

Client Sample ID: East Wall S - End
Collection Date: 10/27/2016 2:20:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 11:21:40 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/28/2016 11:24:25 AM	28348
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2016 11:24:25 AM	28348
Surr: DNOP	94.0	70-130		%Rec	1	10/28/2016 11:24:25 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/28/2016 11:13:44 AM	SG3830
Surr: BFB	86.8	68.3-144		%Rec	1	10/28/2016 11:13:44 AM	SG3830
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	10/28/2016 11:13:44 AM	SB3830
Toluene	ND	0.046		mg/Kg	1	10/28/2016 11:13:44 AM	SB3830
Ethylbenzene	ND	0.046		mg/Kg	1	10/28/2016 11:13:44 AM	SB3830
Xylenes, Total	ND	0.091		mg/Kg	1	10/28/2016 11:13:44 AM	SB3830
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	10/28/2016 11:13:44 AM	SB3830

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

Analytical Report
Lab Order **1610E03**
Date Reported: **10/31/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Blanco Tanks
Lab ID: 1610E03-006 **Matrix:** SOIL

Client Sample ID: West Wall N - End
Collection Date: 10/27/2016 2:25:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 11:34:05 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/28/2016 11:46:20 AM	28348
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/28/2016 11:46:20 AM	28348
Surr: DNOP	93.7	70-130		%Rec	1	10/28/2016 11:46:20 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	10/28/2016 11:38:11 AM	SG38309
Surr: BFB	83.2	68.3-144		%Rec	1	10/28/2016 11:38:11 AM	SG38309
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	10/28/2016 11:38:11 AM	SB38309
Toluene	ND	0.044		mg/Kg	1	10/28/2016 11:38:11 AM	SB38309
Ethylbenzene	ND	0.044		mg/Kg	1	10/28/2016 11:38:11 AM	SB38309
Xylenes, Total	ND	0.088		mg/Kg	1	10/28/2016 11:38:11 AM	SB38309
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	10/28/2016 11:38:11 AM	SB38309

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

Analytical Report
Lab Order **1610E03**
Date Reported: **10/31/2016**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services
Project: Blanco Tanks
Lab ID: 1610E03-007 **Matrix:** SOIL

Client Sample ID: West Wall S - End
Collection Date: 10/27/2016 2:30:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 11:46:30 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	23	9.6		mg/Kg	1	10/28/2016 12:34:08 PM	28348
Motor Oil Range Organics (MRO)	59	48		mg/Kg	1	10/28/2016 12:34:08 PM	28348
Surr: DNOP	92.3	70-130		%Rec	1	10/28/2016 12:34:08 PM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	10/28/2016 12:02:32 PM	SG3830
Surr: BFB	103	68.3-144		%Rec	1	10/28/2016 12:02:32 PM	SG3830
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	10/28/2016 12:02:32 PM	SB3830
Toluene	ND	0.036		mg/Kg	1	10/28/2016 12:02:32 PM	SB3830
Ethylbenzene	ND	0.036		mg/Kg	1	10/28/2016 12:02:32 PM	SB3830
Xylenes, Total	ND	0.073		mg/Kg	1	10/28/2016 12:02:32 PM	SB3830
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	10/28/2016 12:02:32 PM	SB3830

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: Blanco Tanks
Lab ID: 1610E03-008 **Matrix:** SOIL

Client Sample ID: North Wall E - End
Collection Date: 10/27/2016 2:35:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 11:58:55 AM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	16	9.6		mg/Kg	1	10/28/2016 12:10:56 PM	28348
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/28/2016 12:10:56 PM	28348
Surr: DNOP	90.6	70-130		%Rec	1	10/28/2016 12:10:56 PM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	10/28/2016 11:27:52 AM	28328
Surr: BFB	96.7	68.3-144		%Rec	5	10/28/2016 11:27:52 AM	28328
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.11		mg/Kg	5	10/28/2016 11:27:52 AM	28328
Toluene	0.42	0.23		mg/Kg	5	10/28/2016 11:27:52 AM	28328
Ethylbenzene	ND	0.23		mg/Kg	5	10/28/2016 11:27:52 AM	28328
Xylenes, Total	0.97	0.45		mg/Kg	5	10/28/2016 11:27:52 AM	28328
Surr: 4-Bromofluorobenzene	110	80-120		%Rec	5	10/28/2016 11:27:52 AM	28328

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: Blanco Tanks
Lab ID: 1610E03-009 **Matrix:** SOIL

Client Sample ID: North Wall W - End
Collection Date: 10/27/2016 2:40:00 PM
Received Date: 10/28/2016 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **LGT**	
Chloride	ND	30		mg/Kg	20	10/28/2016 12:36:09 PM	28354
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	13	9.5		mg/Kg	1	10/28/2016 11:47:52 AM	28348
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/28/2016 11:47:52 AM	28348
Surr: DNOP	92.9	70-130		%Rec	1	10/28/2016 11:47:52 AM	28348
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	10/28/2016 12:26:50 PM	SG3830
Surr: BFB	88.7	68.3-144		%Rec	1	10/28/2016 12:26:50 PM	SG3830
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	10/28/2016 12:26:50 PM	SB3830
Toluene	ND	0.042		mg/Kg	1	10/28/2016 12:26:50 PM	SB3830
Ethylbenzene	ND	0.042		mg/Kg	1	10/28/2016 12:26:50 PM	SB3830
Xylenes, Total	ND	0.084		mg/Kg	1	10/28/2016 12:26:50 PM	SB3830
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	10/28/2016 12:26:50 PM	SB3830

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#: **1610E03**

31-Oct-16

Client: Williams Field Services

Project: Blanco Tanks

Sample ID	**MB-28354**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**28354**	RunNo:	**38328**					
Prep Date:	**10/28/2016**	Analysis Date:	**10/28/2016**	SeqNo:	**1196275**	Units:	**mg/Kg**			

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

Sample ID	**LCS-28354**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**28354**	RunNo:	**38328**					
Prep Date:	**10/28/2016**	Analysis Date:	**10/28/2016**	SeqNo:	**1196276**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.2	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#: **1610E03**

31-Oct-16

Client: Williams Field Services

Project: Blanco Tanks

Sample ID **LCS-28348**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **28348**	RunNo: **38296**
Prep Date: **10/28/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195205** 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	98.2	62.6	124			
Surr: DNOP	4.5		5.000		89.2	70	130			

Sample ID **MB-28348**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **28348**	RunNo: **38296**
Prep Date: **10/28/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195206** 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		89.7	70	130			

Sample ID **1610E03-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Bottom Comp**	Batch ID: **28348**	RunNo: **38296**
Prep Date: **10/28/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195588** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.8	48.97	18.22	74.0	33.9	141			
Surr: DNOP	4.6		4.897		93.9	70	130			

Sample ID **1610E03-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **Bottom Comp**	Batch ID: **28348**	RunNo: **38296**
Prep Date: **10/28/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195589** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.2	46.17	18.22	57.8	33.9	141	19.3	20	
Surr: DNOP	4.1		4.617		89.3	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#: **1610E03**

31-Oct-16

Client: Williams Field Services

Project: Blanco Tanks

Sample ID	MB-28328	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	28328		RunNo:	38308				
Prep Date:	10/27/2016	Analysis Date:	10/28/2016		SeqNo:	1195979	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.1	68.3	144			

Sample ID	LCS-28328	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	28328		RunNo:	38308				
Prep Date:	10/27/2016	Analysis Date:	10/28/2016		SeqNo:	1195980	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	108	74.6	123			
Surr: BFB	950		1000		95.1	68.3	144			

Sample ID	5ML RB	SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS	Batch ID:	SG38309		RunNo:	38309				
Prep Date:		Analysis Date:	10/28/2016		SeqNo:	1196004	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	870		1000		87.4	68.3	144			

Sample ID	2.5UG GRO LCS	SampType:	LCS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	LCSS	Batch ID:	SG38309		RunNo:	38309				
Prep Date:		Analysis Date:	10/28/2016		SeqNo:	1196005	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	74.6	123			
Surr: BFB	930		1000		92.7	68.3	144			

Sample ID	1610E03-004AMS	SampType:	MS		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	East Wall N - End	Batch ID:	SG38309		RunNo:	38309				
Prep Date:		Analysis Date:	10/28/2016		SeqNo:	1196006	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	61.3	150			
Surr: BFB	960		1000		95.6	68.3	144			

Sample ID	1610E03-004AMSD	SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	East Wall N - End	Batch ID:	SG38309		RunNo:	38309				
Prep Date:		Analysis Date:	10/28/2016		SeqNo:	1196007	Units:	mg/Kg		
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
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#: **1610E03**

31-Oct-16

Client: Williams Field Services

Project: Blanco Tanks

Sample ID	**1610E03-004AMSD**	SampType: **MSD**		TestCode: **EPA Method 8015D: Gasoline Range**						
Client ID:	**East Wall N - End**	Batch ID: **SG38309**		RunNo: **38309**						
Prep Date:		Analysis Date: **10/28/2016**		SeqNo: **1196007**		Units: **mg/Kg**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	61.3	150	3.90	20	
Surr: BFB	950		1000		94.7	68.3	144	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#: **1610E03**

31-Oct-16

Client: Williams Field Services
Project: Blanco Tanks

Sample ID **MB-28328**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **28328**	RunNo: **38308**
Prep Date: **10/27/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195993** 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		103	80	120			

Sample ID **LCS-28328**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **28328**	RunNo: **38308**
Prep Date: **10/27/2016**	Analysis Date: **10/28/2016**	SeqNo: **1195994** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	75.2	115			
Toluene	0.98	0.050	1.000	0	97.9	80.7	112			
Ethylbenzene	0.98	0.050	1.000	0	97.5	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	96.8	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID **5ML RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **SB38309**	RunNo: **38309**
Prep Date:	Analysis Date: **10/28/2016**	SeqNo: **1196019** 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: **SB38309**	RunNo: **38309**
Prep Date:	Analysis Date: **10/28/2016**	SeqNo: **1196020** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	87.6	75.2	115			
Toluene	0.86	0.050	1.000	0	86.0	80.7	112			
Ethylbenzene	0.88	0.050	1.000	0	87.7	78.9	117			
Xylenes, Total	2.8	0.10	3.000	0	92.2	79.2	115			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.1	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
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#: **1610E03**

31-Oct-16

Client: Williams Field Services

Project: Blanco Tanks

Sample ID **1610E03-005AMS**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East Wall S - End**	Batch ID: **SB38309**	RunNo: **38309**
Prep Date:	Analysis Date: **10/28/2016**	SeqNo: **1196021** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.3	71.5	122			
Toluene	0.89	0.050	1.000	0	89.0	71.2	123			
Ethylbenzene	0.91	0.050	1.000	0.008783	89.9	75.2	130			
Xylenes, Total	2.8	0.10	3.000	0.02479	92.6	72.4	131			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID **1610E03-005AMSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **East Wall S - End**	Batch ID: **SB38309**	RunNo: **38309**
Prep Date:	Analysis Date: **10/28/2016**	SeqNo: **1196022** 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	91.3	71.5	122	1.08	20	
Toluene	0.87	0.050	1.000	0	87.1	71.2	123	2.13	20	
Ethylbenzene	0.90	0.050	1.000	0.008783	88.7	75.2	130	1.33	20	
Xylenes, Total	2.8	0.10	3.000	0.02479	91.8	72.4	131	0.935	20	
Surr: 4-Bromofluorobenzene	1.0		1.000		101	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
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: 1610E03 RcptNo: 1

Received by/date: AT 10/28/16

Logged By: Anne Thorne 10/28/2016 7:55:00 AM Anne Thorne

Completed By: Anne Thorne 10/28/2016 Anne Thorne

Reviewed By: JAG 10/28/16

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 ☐	
13. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
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 ☐	

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

Adjusted? _____

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	1.6	Good	Yes			

Chain-of-Custody Record

Client: WFS

Mailing Address: 188 CR4900
Bloomfield NM 87413

Phone #: 505-632-4807

Email or Fax#: Michael.Hannan@williams.com

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

Accreditation
☑ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: Same day
☐ Standard ☑ Rush 10-28-16

Project Name: Blanco Tanks

Project #:

Project Manager: Michael Hannan

Sampler: Morgan Killior

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
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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 # (At 10/28/16 Meoh Kits)	Preservative Type	HEAL No. 1610D03	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlorides				Air Bubbles (Y or N)
27/16	2:00	soil	Bottom comp	1-402	Cool	-001	X		X									X				
27/16	2:05	soil	Southwall E-End	1-402		-002	X		X									X				
27/16	2:10	soil	Southwall W-End	1-402		-003	X		X									X				
27/16	2:15	soil	Eastwall N-End	1-402		-004	X		X									X				
27/16	2:20	soil	Eastwall S-End	1-402		-005	X		X									X				
27/16	2:25	soil	westwall N-End	1-402		-006	X		X									X				
10/27/16	2:30	soil	Westwall S-End	1-402		-007	X		X									X				
10/27/16	2:35	soil	Northwall E-End	1-402		-008	X		X									X				
10/27/16	2:40	soil	Northwall W-End	1-402		-009	X	✓	X								✓	X				

Date	Time	Relinquished by	Received by	Date	Time
10/27/16	1600	Morgan Killior		10/27/16	1600
10/27/16	1941	Christine Walker		10/28/16	0755

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.