Administrative/Environmental Order



AE Order Number Banner

Report Description

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

App Number: pJK1424834298

3RP - 1014

Williams Four Corners, LLC

3/1/2018

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

State of New Mexico Energy Minerals and Natural Resources

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

OIL CONS. DIV DIST. 3

AUG 21 2017

Form C-141 Revised April 3, 2017

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

Release Notification and Corrective Action

OPERATOR	
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	OPERATOR	\boxtimes	Initial Report	\boxtimes	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 Milagro	Facility Type Gas Treating Plant				

	Surface Owner Williams	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
0	12	29N	11W					Rio Arriba

Latitude 36.735966° N Longitude -107.942329° W NAD83

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release 157.44 MCF	Volume Recovered 0 MCF
Source of Release Pressure Relief Valve	Date and Hour of Occurrence	Date and Hour of Discovery
	08/04/2017 16:30 PM	08/04/2017 16:30 PM
Was Immediate Notice Given?	If YES, To Whom?	
Yes No X Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.
Yes X No		
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.*		
The Milagro Gas Treating Plant boilers went down, which in turn caused t	he steam turbine (electricity) generato	rs to go down. The loss of electrical power
caused a partial station ESD, which caused a gas release from the station o	utlet piping.	

Describe Area Affected and Cleanup Action Taken.*

No cleanup required on natural gas releases vented to atmosphere.

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

11.	OIL CONSERVATION DIVISION
Signature: MM	Λ Λ Q
Printed Name: Michael Hannan	Approved by Environmental Specialist:
Title: Engineer, Sr.	Approval Date: 8/23/17 Expiration Date:
E-mail Address: michael.hannan@williams.com	Conditions of Approval:
Date: 08/16/2017 Phone: (505) 632-4807	
Attach Additional Sheets If Necessary	131723542063

OIL CONS. DIV DIST. 3 Form C-141 AUG 07 2017 Revised August 8, 2011 Copy to appropriate District Office in adapted with 19.15.29 NMAC.

API No.

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

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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

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 Reames A-1 Drip Tank	Facility Type Field Tank		

Surface Owner BLM

Mineral Owner

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Α	24	26N	6W					Rio Arriba

Latitude <u>36.4755° N</u> Longitude -<u>107.4119° W</u>

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release Estimated at 10-15 gallons	Volume Recovered 10-15 gallons
Source of Release Tank	Date and Hour of Occurrence 3/10/2017, 1:00 PM MST	Date and Hour of Discovery 3/10/2017, 1:00 PM MST
Was Immediate Notice Given?	If YES, To Whom? Cory Smith via	
By Whom? Mitch Morris	Date and Hour 3/13/2017 3:52 pm	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate Not Applicable	ercourse.
If a Watercourse was Impacted, Describe Fully.*		
Not Applicable		
Describe Cause of Problem and Remedial Action Taken.*		
An Operations Technician arrived on-site and discovered standing liquid r immediately isolated. A cleanup crew was quickly mobilized to excavate and will be submitted with the Final Report.		
A cleanup crew was quickly mobilized to excavate the extent of impacted site.	soil. Please see the attached additiona	al information regarding remediation of this
I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release in public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate or the environment. In addition, NMOCD acceptance of a C-141 report defederal, state, or local laws and/or regulations.	otifications and perform corrective act e NMOCD marked as "Final Report" of e contamination that pose a threat to g	ions for releases which may endanger does not relieve the operator of liability round water, surface water, human health
	OIL CONSERV	ATION DIVISION /
Signature:	Approved by Environmental Specialis	
Printed Name: Mitch Morris		
Title: Environmental Specialist	Approval Date: 8/29/17	Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval:	Attached
Date: 08/01/2017 Phone: 505-632-4708	1	
Attach Additional Sheets If Necessary	720640095	$(\overline{2})$

Remediation Excavation and Sampling Form

Site Name		Reams A-1	Drip Tank_			
Excavation D	imensi	ons (feet)				
	20	Length	15	Width	6	Depth

Excavation Diagram and Sample Locations

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



Sample Information

OCD Witness Sampling Yes or No Agency(s) Representative(s) _____ Unknown _____

		Туре	Location	
Sample ID	Sample Date	(Composite, Grab)	(Floor, Sidewall)	Comments
1703B59-001	3/19/2017	Composite	North Sidewall	
1703B59-002	3/19/2017	Composite	South Sidewall	
1703B59-003	3/19/2017	Composite	East Sidewall	
1703B59-004	3/19/2017	Composite	West Sidewall	



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

March 24, 2017

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

RE: Lat H-16

OrderNo.: 1703B59

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/23/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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,

andig

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis	Labora	atory, Inc.		Lab Order 1703B59 Date Reported: 3/24/2017
CLIENT: Williams Field ServicesProject: Lat H-16Lab ID: 1703B59-001	Matrix:	C MEOH (SOIL)	Collectio	ple ID: Lat H-16 North Wall n Date: 3/19/2017 9:25:00 AM d Date: 3/23/2017 7:20:00 AM
Analyses	Result	PQL Qual	Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS Chloride	ND	30	mg/Kg	Analyst: LGT 20 3/23/2017 11:51:12 AM 30864
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S		Analyst: TOM
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	39 ND 110	9.6 48 70-130	mg/Kg mg/Kg %Rec	 3/23/2017 10:36:39 AM 30857 3/23/2017 10:36:39 AM 30857 3/23/2017 10:36:39 AM 30857
EPA METHOD 8015D: GASOLINE RANGE	Ξ			Analyst: NSB
Gasoline Range Organics (GRO) Surr: BFB	ND 91.0	3.5 54-150	mg/Kg %Rec	1 3/23/2017 11:45:28 AM G41606 1 3/23/2017 11:45:28 AM G41606
EPA METHOD 8021B: VOLATILES				Analyst: NSB
Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	ND ND ND 109	0.017 0.035 0.035 0.069 66.6-132	mg/Kg mg/Kg mg/Kg %Rec	1 3/23/2017 11:45:28 AM R41606 1 3/23/2017 11:45:28 AM R41606

Analytical Report

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 8
	ND	Not Detected at the Reporting Limit	Р	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 1703B59	

Date Reported: 3/24/2017

Hall Environmental Analysis Laboratory, Inc.

 CLIENT: Williams Field Services
 Client Sample ID: Lat H-16 South Wall

 Project:
 Lat H-16
 Collection Date: 3/19/2017 9:30:00 AM

 Lab ID:
 1703B59-002
 Matrix: MEOH (SOIL)
 Received Date: 3/23/2017 7:20:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	35	30	mg/Kg	20	3/23/2017 12:03:37 PM	30864
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS	S			Analyst	TOM
Diesel Range Organics (DRO)	28	9.6	mg/Kg	1	3/23/2017 10:59:06 AM	30857
Motor Oil Range Organics (MRO)	49	48	mg/Kg	1	3/23/2017 10:59:06 AM	30857
Surr: DNOP	110	70-130	%Rec	1	3/23/2017 10:59:06 AM	30857
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	3/23/2017 12:09:01 PM	G41606
Surr: BFB	90.0	54-150	%Rec	1	3/23/2017 12:09:01 PM	G41606
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.019	mg/Kg	1	3/23/2017 12:09:01 PM	R41606
Toluene	ND	0.038	mg/Kg	1	3/23/2017 12:09:01 PM	R41606
Ethylbenzene	ND	0.038	mg/Kg	1	3/23/2017 12:09:01 PM	R41606
Xylenes, Total	ND	0.075	mg/Kg	1	3/23/2017 12:09:01 PM	R41606
Surr: 4-Bromofluorobenzene	109	66.6-132	%Rec	1	3/23/2017 12:09:01 PM	R41606

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.		Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 8
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	S % Recovery outside of range due to dilution or matrix		Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc. Date Reported: 3/24/2017							
CLIENT: Williams Field Services		(Client Samp	le ID: La	t H-16 East Wall		
Project: Lat H-16			Collection	Date: 3/1	9/2017 9:35:00 AM		
Lab ID: 1703B59-003	Matrix:	MEOH (SOIL)	Received	Date: 3/2	23/2017 7:20:00 AM		
Analyses	Result	PQL Qual	Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	LGT	
Chloride	33	30	mg/Kg	20	3/23/2017 12:16:02 PM	30864	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analyst	TOM	
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	3/23/2017 11:21:11 AM	30857	
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	3/23/2017 11:21:11 AM	30857	
Surr: DNOP	106	70-130	%Rec	1	3/23/2017 11:21:11 AM	30857	
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst	NSB	
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	3/23/2017 12:32:35 PM	G41606	
Surr: BFB	90.1	54-150	%Rec	1	3/23/2017 12:32:35 PM	G41606	
EPA METHOD 8021B: VOLATILES					Analyst:	NSB	
Benzene	ND	0.018	mg/Kg	1	3/23/2017 12:32:35 PM	R41606	
Toluene	ND	0.036	mg/Kg	1	3/23/2017 12:32:35 PM	R41606	
Ethylbenzene	ND	0.036	mg/Kg	1	3/23/2017 12:32:35 PM	R41606	
Xylenes, Total	ND	0.072	mg/Kg	1	3/23/2017 12:32:35 PM	R41606	
Surr: 4-Bromofluorobenzene	110	66.6-132	%Rec	1	3/23/2017 12:32:35 PM	R41606	

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.		Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of
	ND	Not Detected at the Reporting Limit	Р	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 1703B59

Hall Er	Hall Environmental Analysis Laboratory, Inc. Lab Order 1703B59 Date Reported: 3/24								
Project:	Williams Field Services Lat H-16			Collection	Date: 3/19	H-16 West Wall 9/2017 9:40:00 AM			
Lab ID: Analyses	1703B59-004	Matrix: Result	MEOH (SOIL) PQL Qual			3/2017 7:20:00 AM Date Analyzed	Batch		
EPA MET Chloride	HOD 300.0: ANIONS	ND	30	mg/Kg	20	Analyst: 3/23/2017 12:28:27 PM			
Diesel Ra	HOD 8015M/D: DIESEL RANG ange Organics (DRO) Range Organics (MRO)	E ORGANICS 28 ND 108	9.6 48 70-130	mg/Kg mg/Kg %Rec	1 1 1	Analyst: 3/23/2017 11:43:32 AM 3/23/2017 11:43:32 AM 3/23/2017 11:43:32 AM	30857 30857		
EPA MET	HOD 8015D: GASOLINE RAN Range Organics (GRO)		3.6 54-150	mg/Kg %Rec	1	Analyst: 3/23/2017 12:55:58 PM 3/23/2017 12:55:58 PM	NSB G41606		
Benzene Toluene Ethylbenz Xylenes,		ND ND ND 109	0.018 0.036 0.036 0.072 66.6-132	mg/Kg mg/Kg mg/Kg %Rec	1 1 1 1	Analyst: 3/23/2017 12:55:58 PM 3/23/2017 12:55:58 PM 3/23/2017 12:55:58 PM 3/23/2017 12:55:58 PM 3/23/2017 12:55:58 PM	R41606 R41606 R41606 R41606		

Analytical Report

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 8
	ND	Not Detected at the Reporting Limit	Р	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.

Sample ID MB-30864	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 30864	RunNo: 41611
Prep Date: 3/23/2017	Analysis Date: 3/23/2017	SeqNo: 1305782 Units: mg/Kg
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND 1.5	
Sample ID LCS-30864	SampType: LCS	TestCode: EPA Method 300.0: Anions
Sample ID LCS-30864 Client ID: LCSS	SampType: LCS Batch ID: 30864	TestCode: EPA Method 300.0: Anions RunNo: 41611
	1 31	
Client ID: LCSS	Batch ID: 30864 Analysis Date: 3/23/2017	RunNo: 41611

Qualifiers:

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

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WO#: 1703B59 24-Mar-17

Client:

Hall Environmental Analysis Laboratory, Inc.

Williams Field Services

Project: Lat H-16	5		
Sample ID MB-30857	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30857	RunNo: 41593	
Prep Date: 3/23/2017	Analysis Date: 3/23/2017	SeqNo: 1304737	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	107 70	130
Sample ID LCS-30857	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30857	RunNo: 41593	
Prep Date: 3/23/2017	Analysis Date: 3/23/2017	SeqNo: 1304744	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	50 10 50.00	0 100 63.8	11 <mark>6</mark>
Surr: DNOP	5.2 5.000	104 70	130
Sample ID LCS-30846	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 30846	RunNo: 41593	
Prep Date: 3/22/2017	Analysis Date: 3/23/2017	SeqNo: 1305627	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.2 5.000	103 70	130
Sample ID MB-30846	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 30846	RunNo: 41593	
Prep Date: 3/22/2017	Analysis Date: 3/23/2017	SeqNo: 1305628	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	105 70	130

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Η Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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24-Mar-17

WO#: 1703B59

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703B59 24-Mar-17

Client: Project:	Williams Lat H-16	Field Serv	vices								
Sample ID RB		SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PB	s	Batch	D: G4	1606	F	RunNo: 4	1606				
Prep Date:		Analysis D	ate: 3/	23/2017	S	SeqNo: 1	305565	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Org Surr: BFB	ganics (GRO)	ND 910	5.0	1000		91.2	54	150			
Sample ID 2.5	UG GRO LCS	SampT	ype: LC	s	Tes	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LC:	SS	Batch	ID: G4	1606	F	unNo: 4	1606				
Prep Date:		Analysis D	ate: 3/	23/2017	S	eqNo: 1	305566	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Org Surr: BFB	ganics (GRO)	27 1000	5.0	25.00 1000	0	109 99.6	76.4 54	125 150			

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

Client:	Williams Field Services
Project:	Lat H-16

Sample ID RB	Samp	SampType: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batc	h ID: R4	1606	F	RunNo: 4	1606				
Prep Date:	Analysis D	Date: 3/	23/2017	S	SeqNo: 1	305574	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		112	66.6	132			
Sample ID 100NG BTEX L	CS SampT	ype: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	n ID: R4	1606	F	RunNo: 4	1606				
Prep Date:	Analysis D	ate: 3/	23/2017	S	SeqNo: 1	305575	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	66.6	132			

Qualifiers:

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

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24-Mar-17

WO#: 1703B59

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-345-397	al Analysis Labor 4901 Hawkin Ibuquerque, NM 8 75 FAX: 505-345- hallenvironmenta	AS NE 17109 Sam 14107	ple Log-In Check List
Client Name: WILLIAMS FIELD SERVI Work Order Number	er: 1703B59		RcptNo: 1
Received by/date: 03 23 17			
Logged By: Lindsay Mangin 3/23/2017 7:20:00 AF	M	Julythigo	
Completed By: Lindsay Mangin 3/23/2017 8j31:08 AM	M	Andythere	1
Reviewed By: (
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 🗌	
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 🗹	# of preserved
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌	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 I	Phone 🔄 Fax	In Person
Regarding:		Marinia lista de la compose	and an advected by the second s
Client Instructions:] 17. Additional remarks:			
18. <u>Cooler Information</u> <u>Cooler No</u> Temp ^o C Condition Seal Intact Seal No 1 1.7 Good Yes	Seal Date	Signed By	

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Client:	WF	3	stody Record	☐ Standard Project Name	Z Rush	3-23-17				AN	IAL	Y	SIS	5 L	AB	0	RAT		
Mailino	Addrass										ww.ha								
MOHUS	Auuress	. 183	CR 4900	L++ /	7-16	l.		490	1 Ha	wkins	NE	Alb	ugu	erque	e, NM	A 871	109		
BI	00m	Field	Nm 874/3	Project #:				Tel	505	-345-	design of the second		and the second second second	in the second second	345-4	4107	-		
Phone f											Å	Analy	ysis	Req	uest				
		n:tch	Morrig Que Min . can	Project Mana	ger:		=	uly,	RO				(10	(I)					
	Package:		•	111 11 11 155			(802	SSS	W/W		(3)		04.5	CB					
C Stan	No. of Concession, Name of Street, or other		Level 4 (Full Validation)	Mitch	morri	<u> </u>	U Image: Second secon												
Accredi		- 046-	-	Sampler:M	oggan K	11.60													
O NEL			ſ	On Ice: Sample Tem		I NO T		+	BRO	418	018	in	0	es /		NO.	_		
	(Type)_			Sample tem	perature: /,	Т	THE PARTY	ITB	B	pod pod	10	Aeta	CI.	ticid	8	7-in	In de		
Data	Thinks	. A Factoria	Constantia Discourse (D)	Container	Preservative		BTEX + M TBE	2 +	015	Met	(83	RCRA 8 Metals	S (F	pest	8260B (VOV)	8270 (Semi-VOA)	4		
Date	Time	Matrix	Sample Request ID	Type and #	Туре	HEAL No.	EX	Щ	E S	H	H's	RA	ion	81	60E	20	T		
						1703859					1 d	K	An	80	82	82	V		
115/17	9:3	50,1	Let think Pall	1-402	Cool	-001	X		X								X		
1/17	9:30		Lat H-16 South woll	1-402	1	-002	X		X								X		
A/17	9:35-		to the second se	1-402		-102	X		X				1				X		
	9:40		Let H-16 Westwell	1.	J.	Ani	N N		X	-	-	1					X	-	\vdash
17/17	7:40	Sor	westwell	1-403		-at			-1			-	-						
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Date:	1 /1 U	Relinguist	2 Seller	Received by:	what	2 122/17 17/1 Date Time	-												
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122/07	11874	1211	MA WONDO mitted to Hall Environmental may be sub	F +1	~ 08	23/17 0722	and the second second									Alexandra and			

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

March 20, 2017

Mitch Morris Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413 TEL: (505) 632-4442 FAX OIL CONS. DIV DIST. 3 APR 0 7 2017

RE: Lat H-16/Reames A1 Drip Tank Spill

OrderNo.: 1703794

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/15/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report	
Lab Order 1703794	

Date Reported: 3/20/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field ServicesProject:Lat H-16/Reames A1 Drip Tank SpillLab ID:1703794-001Matrix: SOIL

Client Sample ID: Lat H-16 Reames A-1 Sidewalls Collection Date: 3/14/2017 1:30:00 PM Received Date: 3/15/2017 7:20:00 AM

Analyses	Result	PQL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	30	mg/Kg	20	3/17/2017 6:05:47 PM	30766
EPA METHOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst	MAB
Diesel Range Organics (DRO)	46	9.4	mg/Kg	1	3/16/2017 3:15:04 PM	30698
Motor Oil Range Organics (MRO)	49	47	mg/Kg	1	3/16/2017 3:15:04 PM	30698
Surr: DNOP	77.2	70-130	%Rec	1	3/16/2017 3:15:04 PM	30698
EPA METHOD 8015D: GASOLINE RANGE	Ξ				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	3/16/2017 2:12:46 PM	30712
Surr: BFB	88.0	54-150	%Rec	1	3/16/2017 2:12:46 PM	30712
EPA METHOD 8021B: VOLATILES					Analyst	NSB
Benzene	ND	0.023	mg/Kg	1	3/16/2017 2:12:46 PM	30712
Toluene	ND	0.047	mg/Kg	1	3/16/2017 2:12:46 PM	30712
Ethylbenzene	ND	0.047	mg/Kg	1	3/16/2017 2:12:46 PM	30712
Xylenes, Total	ND	0.094	mg/Kg	1	3/16/2017 2:12:46 PM	30712
Surr: 4-Bromofluorobenzene	84.0	66.6-132	%Rec	1	3/16/2017 2:12:46 PM	30712

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 6
	ND	Not Detected at the Reporting Limit		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			Sample container temperature is out of limit as specified

Hall E	nvironmental Analy	ysis Laborat	tory, Inc	2.			Date Reported: 3/20/20	17
CLIENT: Project:	Williams Field Services Lat H-16/Reames A1 Drip	Tank Spill			and an and a second		t H-16 Reames A-1 Bo 4/2017 1:40:00 PM	ottom C
Lab ID:	1703794-002	Matrix:	SOIL		Received	Date: 3/1	5/2017 7:20:00 AM	
Analyses		Result	PQL (Qual	Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS						Analyst	MRA
Chloride		ND	30		mg/Kg	20	3/17/2017 6:18:12 PM	30766
EPA MET	HOD 8015M/D: DIESEL RA	NGE ORGANICS	5				Analyst	MAB
Diesel R	ange Organics (DRO)	29	10		mg/Kg	1	3/16/2017 3:44:16 PM	30698
Motor Oi	I Range Organics (MRO)	50	50		mg/Kg	1	3/16/2017 3:44:16 PM	30698
Surr: I	DNOP	84.5	70-130		%Rec	1	3/16/2017 3:44:16 PM	30698
EPA MET	HOD 8015D: GASOLINE RA	ANGE					Analyst	NSB
Gasoline	e Range Organics (GRO)	17	4.7		mg/Kg	1	3/16/2017 9:11:41 PM	30712
Surr: I	BFB	187	54-150	S	%Rec	1	3/16/2017 9:11:41 PM	30712
EPA MET	THOD 8021B: VOLATILES						Analyst	NSB
Benzene		ND	0.024		mg/Kg	1	3/16/2017 9:11:41 PM	30712
Toluene		0.13	0.047		mg/Kg	1	3/16/2017 9:11:41 PM	30712
Ethylber	izene	0.098	0.047		mg/Kg	1	3/16/2017 9:11:41 PM	30712
Xylenes,	Total	1.4	0.095		mg/Kg	1	3/16/2017 9:11:41 PM	30712
Surr: 4	4-Bromofluorobenzene	84.6	66.6-132		%Rec	1	3/16/2017 9:11:41 PM	30712

Analytical Report Lab Order 1703794

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

Qualifiers: *		Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 6
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Client:	Williams Field Services
Project:	Lat H-16/Reames A1 Drip Tank Spill

Sample ID MB-30766	SampType: mblk	TestCode: EPA Method 3	300.0: Anions	
Client ID: PBS	Batch ID: 30766	RunNo: 41494		
Prep Date: 3/17/2017	Analysis Date: 3/17/2017	SeqNo: 1301155	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID LCS-30766	SampType: Ics	TestCode: EPA Method 3	300.0: Anions	
Sample ID LCS-30766 Client ID: LCSS	SampType: Ics Batch ID: 30766	TestCode: EPA Method 3 RunNo: 41494	300.0: Anions	
	1 31	RunNo: 41494	300.0: Anions Units: mg/Kg	
Client ID: LCSS	Batch ID: 30766 Analysis Date: 3/17/2017	RunNo: 41494		RPDLimit Qual

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits R
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 3 of 6

20-Mar-17

WO#: 1703794

Hall Environmental Analysis Laboratory, Inc.

WO#: 1703794

Page 4 of 6

20-Mar-17

Client:Williams Field ServicesProject:Lat H-16/Reames A1 Drip Tank Spill

Sample ID LCS-30698	SampT	ype: LC	S	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch	ID: 30	698	R	RunNo: 41403					
Prep Date: 3/15/2017	Analysis D	ate: 3/	16/2017	S	eqNo: 1	299328	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.8	63.8	116			
Surr: DNOP	5.1		5.000		102	70	130			
Sample ID MB-30698	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: PBS	Batch	ID: 30	698	R	unNo: 4	1403				
Prep Date: 3/15/2017	Analysis D	ate: 3/	16/2017	S	eqNo: 1	299329	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	Result ND	PQL 10	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)			SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Client: Williams Field Services Lat H-16/Reames A1 Drip Tank Spill **Project:** Sample ID MB-30712 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Batch ID: 30712 RunNo: 41422 Client ID: PBS Analysis Date: 3/16/2017 SeqNo: 1299218 Units: mg/Kg Prep Date: 3/15/2017 HighLimit %RPD RPDLimit Qual Result PQL SPK value SPK Ref Val %REC LowLimit Analyte ND 5.0 Gasoline Range Organics (GRO) Surr: BFB 730 1000 72.6 54 150 TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30712 SampType: LCS Client ID: LCSS Batch ID: 30712 RunNo: 41422 Prep Date: Analysis Date: 3/16/2017 SeqNo: 1299221 Units: mg/Kg 3/15/2017 SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result PQL LowLimit Analyte 115 76.4 125 Gasoline Range Organics (GRO) 29 5.0 25.00 0 Surr: BFB 810 1000 81.3 54 150 Sample ID MB-30725 TestCode: EPA Method 8015D: Gasoline Range SampType: MBLK Client ID: PBS Batch ID: 30725 RunNo: 41456 Prep Date: 3/16/2017 Analysis Date: 3/17/2017 SeqNo: 1300833 Units: %Rec %REC %RPD **RPDLimit** Qual Result SPK value SPK Ref Val LowLimit HighLimit Analyte PQL Surr: BFB 690 1000 68.6 54 150 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Sample ID LCS-30725 Client ID: LCSS Batch ID: 30725 RunNo: 41456 Prep Date: 3/16/2017 Analysis Date: 3/17/2017 SeqNo: 1300834 Units: %Rec %REC %RPD RPDLimit SPK value SPK Ref Val HighLimit Qual Analyte Result PQL LowLimit Surr: BFB 880 1000 88.2 54 150

Qualifiers:

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

Page 5 of 6

WO#: 1703794 20-Mar-17

Hall	Environmental	Analysis	Laboratory	, Inc.

Client:	Willia	ms Field Ser	vices								
Project:	Lat H-	16/Reames A	A1 Drip	Tank Spill							
Sample ID	MD 20742	Samo			Tos		DA Mothod	8021B: Volat	iloc		
		1 21						OUZID. VOIAL	lies		
	PBS		h ID: 30			RunNo: 4					
Prep Date:	3/15/2017	Analysis [Date: 3/	16/2017	S	SeqNo: 1	299243	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.025								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	0.79		1.000		79.2	66.6	132			
Sample ID LCS-30712 SampType: LCS TestCode: EPA Method 8021B: Volatiles											
Client ID:	LCSS	Batc	h ID: 30	712	F	RunNo: 4	1422				
Prep Date:	3/15/2017	Analysis [Date: 3/	16/2017	S	SeqNo: 1	299244	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.97	0.025	1.000	0	97.2	80	120			
Toluene		0.99	0.050	1.000	0	98.6	80	120			
Ethylbenzene		1.0	0.050	1.000	0	100	80	120			
Xylenes, Total		3.1	0.10	3.000	0	102	80	120			
Surr: 4-Brom	ofluorobenzene	0.85		1.000		84.5	66.6	132			
Sample ID	MB-30725	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID:	PBS	Batc	h ID: 30	725	F	unNo: 4	1456				
Prep Date:	3/16/2017	Analysis [Date: 3/	17/2017	S	eqNo: 1	300908	Units: %Red	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	0.75		1.000		75.3	66.6	132			
Sample ID	LCS-30725	Samp	Гуре: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	LCSS	Batc	h ID: 30	725	F	unNo: 4	1456				
Prep Date:	3/16/2017	Analysis [Date: 3/	17/2017	S	eqNo: 1	300909	Units: %Red	:		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Brom	ofluorobenzene	0.74		1.000		74.3	66.6	132			

Qualifiers:

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

Page 6 of 6

WO#: 1703794 20-Mar-17

ENVIRONMENTAL ANALYSIS LABORATORY TEL: 505-3	nmental Analysis Labora 4901 Hawkin. Albuquerque, NM 8; 45-3975 FAX: 505-345-4 www.hallenvironmental.	NE 7109 Samj	ole Log-In Che	eck List
Client Name: WILLIAMS FIELD SERVI Work Order	lumber: 1703794		RcptNo: 1	
Received by/date: AT 0315/1	7			
Logged By: Lindsay Mangin 3/15/2017 7:20	MA 00:	Julythigo		
Completed By: Lindsay Mangin 3/15/2017 12;3	5:22 PM	Andyther		
Reviewed By: 03/5/	17			1
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 🗌		
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 🗹	# of preserved	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗆	bottles checked for pH:	2 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 🗹	
By Whom: Regarding:	Date Via: eMail F	Phone 🗌 Fax	In Person	
Client Instructions:				
17. Additional remarks:				
18. <u>Cooler Information</u> <u>Cooler No</u> Temp °C Condition Seal Intact Seal 1 1.0 Good Yes Page 1 of 1	No Seal Date	Signed By		

. . . .

Client:	hain WFS	-of-Cu	istody Record	Turn-Around	🗆 Rush												IEN RA	
Mailing	Address	: 188	CR 4900	Project Name	H / Rea TONK SP	mes Al		490	01 H		ww.	naller	viror	ment	tal.co	om		
and the second s				Project #:				Te	1. 50	5-345	-397	and the second second	Fax	and the second second	and some states		7	
			2-4708	Sector Sector								Ana	lysis	Req	uest	t		
	^p ackage:	n. tch.	horris@willice_s - com	Project Mana Mifck	Morris		's (8021)	+ TPH (Gas only)	RO / MRO			(CINIC)	PO4,SO,	PCB's				
		□ Othe	r	Sampler: On loe:	MK Ves	🗆 No	SIMF +	Hd1 +	RO / DI	18.1)	04.1)	0/70	03.NO2	s / 8082		(V)		or N)
	(Type)	1		Sample Tem	perature:	-0	MTBE	IBE	3 (G	od 4	po	of of of	N'io	cide	A	2-1	19	N
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX + MI	BTEX + MTBE	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH'S (8310 OF 62/U	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlor. de	Air Bubbles (Y or N)
3/10/17	1:30	5011	Lef H-16 Reenes A-1 Sidevell3 comp. Lef H-16 Reenes A-1 Bottom comp.	1-402	Cool	-001	7	-	×					- w	w	w	×	
3/14/17			Lef H-16 Rockes Al Bottom comp.	1-402	Cost	-002	7		×								×	
												+						
		-					-			-	_	-	-	-				
Date: 3/14/17 Date: 3)14/17	Time: 1725 Time: 1911	Relinquish	× Teleton	Received by:	. Whete	Date Time 3/11/-7 1725 Date 03/15/17 - 0720		narks	5:									

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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	\boxtimes	Initial Report	\boxtimes	Final Report
Name of Company: Williams Four Corners LLC	Contact: Kijun Hong				
Address: 1755 Arroyo Dr., Farmington, NM 87413	Telephone No.: (505) 632-4475				
Facility Name: Bancos Compressor Station	Facility Type: Compressor Statio	on			

Surface Owner:	State	of NM	
----------------	-------	-------	--

Mineral Owner

BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	36	32N	6W					Rio Arriba

Latitude 36.942652 Longitude -107.405361

NATURE OF RELEASE

Type of Release: Natural Gas	Volume of Release: 206 MCF	Volume Recovered: 0 MCF
Source of Release: Pipeline	Date and Hour of Occurrence:	Date and Hour of Discovery:
	07/20/2017 at 8:30 AM	07/20/2017 at 8:30 AM
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🗌 No 🛛 Not Required	NA	
By Whom? NA	Date and Hour: NA	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.
🗌 Yes 🛛 No	NA	
If a Watercourse was Impacted, Describe Fully.*		
NA		
Describe Cause of Problem and Remedial Action Taken.*		
Compressor fuel system valve failure causing release of natural gas to	atmosphere. Valve was replaced.	
Describe Area Affected and Cleanup Action Taken.*		
Release was only gas and no liquids. No soil impacts reported.		
I hereby certify that the information given above is true and complete to the		
regulations all operators are required to report and/or file certain release n		
public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate		
or the environment. In addition, NMOCD acceptance of a C-141 report do		
federal, state, or local laws and/or regulations.	bes not reneve the operator of response	binty for compnance with any other
	OIL CONSERV	ATION DIVISION
	OIL CONSERV	ATION DIVISION
KA KA	Approved by Environmental Specialist	
Signature:	Approximation of the second seco)
Printed Name: Kijun Hong	lan	
Title: Environmental Specialist	Approval Date: 8 312017 H	Expiration Date:
The. Environmental Specialist	Approval Date. 0 3 avr 1	Expiration Date.
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	
	PPro-tan	Attached
Date: 08/2/2017 Phone: (505) 632-4475		
Attach Additional Sheets If Necessary	WE1724341713	
	AAL. 1940 TO ID	

OIL CONS. DIV DIST. 3 AUG 07 2017

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

	OPERATOR	\boxtimes	Initial Report	\boxtimes	Final Report
Name of Company: Williams Four Corners LLC	Contact: Kijun Hong				
Address: 1755 Arroyo Dr., Farmington, NM 87413	Telephone No.: (505) 632-4475				_
Facility Name: A-59	Facility Type: Compressor Stati	on			

Surface Owner: BLM	Mineral Owner	BLM Project No. NMNM089361

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	19	31N	5W					Rio Arriba

Latitude 36.879771 Longitude -107.402171

NATURE OF RELEASE

Type of Release: Natural Gas	Volume of Release: 188 MCF	Volume Recovered: 0 MCF					
Source of Release: Compressor Engine	Date and Hour of Occurrence:	Date and Hour of Discovery:					
	07/31/2017 at 11:30 AM	07/31/17 at 11:30 AM					
Was Immediate Notice Given?	If YES, To Whom?						
Yes No X Not Required	NA						
By Whom? NA	Date and Hour: NA						
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	ercourse.					
Yes X No	NA						
If a Watercourse was Impacted, Describe Fully.*							
NA							
Describe Cause of Problem and Remedial Action Taken.*							
Manual fuel gas scrubber dump valve was left open by contractor aft	er maintenance. The valve was imm	rediately shut upon discovery.					
Describe Area Affected and Cleanur Action Taken *							
Describe Area Affected and Cleanup Action Taken.* There were no liquids associated with this release. No contaminated soil or cleanup required.							
There were no inquitis associated with this release. No containmated	son of cleanup required.						
I hereby certify that the information given above is true and complete to t	he best of my knowledge and understa	and that pursuant to NMOCD rules and					
regulations all operators are required to report and/or file certain release r							
public health or the environment. The acceptance of a C-141 report by th							
should their operations have failed to adequately investigate and remediat							
or the environment. In addition, NMOCD acceptance of a C-141 report of	loes not relieve the operator of response	sibility for compliance with any other					
federal, state, or local laws and/or regulations.							
11 M	OIL CONSERV	ATION DIVISION					
130 to							
Signature:	Approved by Environmental Specialist:						
Printed Name: Kijun Hong		~~ >					
Title: Environmental Specialist	Approval Date: 8 312017	Expiration Date:					
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	Attached					
	_	Attached					
Date: 08/09/2017 Phone: (505) 632-4475							
* Attach Additional Sheets If Necessary	NVI172434202						

OIL CONS. DIV DIST. 3 AUG 14 2017

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

Release Notification and Corrective Action

OPERATOR

	OI LIUII OIL		minual response	I mai reeport
Name of Company Williams Four Corners LLC	Contact Michael Hannan	_		
Address 1755 Arroyo Dr., Bloomfield, NM 87413	Telephone No. (505) 632-4807			
Facility Name Trunk L Compressor Station	Facility Type Compressor Station	t l		

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
Р	21&22	28N	5W					Rio Arriba

Latitude 36.643012° N Longitude -107.354571° W NAD83 NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release 2,800 MCF	Volume Recovered 0 MCF
Source of Release Pressure Relief Valve	Date and Hour of Occurrence	Date and Hour of Discovery
	07/29/2017 11:30 PM	07/30/2017 1:00 AM
Was Immediate Notice Given?	If YES, To Whom?	
Yes No Not Required	Vanessa Fields (NMOCD)	
	Whitney Thomas (BLM); voice ma	il
By Whom? Michael Hannan	Date and Hour	
	07/31/2017 12:58 PM (BLM)	
	07/31/2017 1:02 PM (NMOCD)	
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	ercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken.*

The Trunk L compressor station experienced high discharge pressure, which caused the discharge recycle to reach its set point and engage. This resulted in discharge gas being diverted to the suction line. This eventually caused Unit X00107 (EU No. 4) to go down on high suction pressure. At this point, the discharge and suction pressures equalized and caused the inlet scrubber PSV to release gas to protect equipment. Operations immediately dispatched personnel to the site to block in and de-pressure the unit, thereby minimizing the duration of the release. To prevent recurrence, the control logic will be reprogrammed so that when a unit goes down on high suction pressure, the recycle valve is closed. This will prevent the suction and discharge pressures from equalizing and potentially exceeding the PSV set point.

Describe Area Affected and Cleanup Action Taken.*

No cleanup required on natural gas releases vented to atmosphere.

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

MAA		OIL CONSERVATION	DIVISION
Signature: MM			$\left(\right)$
Printed Name: Michael Hannan		Approved by Environmental Specialist	
Title: Engineer, Sr.		Approval Date: 8 31 307 Expiration	Date:
E-mail Address: michael.hannan@williams.	com	Conditions of Approval:	Attached
Date: 08/08/2017	Phone: (505) 632-4807	<u>_</u>	
Attach Additional Sheets If Necessary		1 4	

NVF1724347186

OIL CONS. DIV DIST. 3 Form C-17. Revised April 3, 2017

Final Report

Initial 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. E. Ferencia Dr., Sente Fo. NM 87610

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State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr.

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa	ta Fe, NM 87505
Release Notifica	tion and Corrective Action
	OPERATOR Initial Report Final Report
Name of Company Williams Four Corners LLC	Contact Mitch Morris
Address 1755 Arroyo Drive	Telephone No. 505-632-4708
Facility Name Lateral E-3	Facility Type Pipeline
Surface Owner Jicarilla Apache Nation Mineral Ow	/ner API No.
LOCAT	TION OF RELEASE
Unit Letter FSection 13Township 27NRange 3WFeet from the NN	North/South Line Feet from the East/West Line OIL County
	<u>33° N</u> Longitude - <u>107.098583° W</u> MAR 1 U 20.7
Type of Release Natural Gas	Volume of Release Estimated at Volume Recovered Estimated at 0 MCF
	1646.76 MCF
Source of Release Pinhole leak in pipeline	Date and Hour of Occurrence Date and Hour of Discovery
Was Immediate Notice Given?	08/09/2016, 10:00 AM MST 08/09/2016, 10:00 AM MST If YES, To Whom? Cory Smith via Telephone
Yes 🗌 No 🗌 Not Requ	
By Whom? Mitch Morris	Date and Hour 08/09/2016 ~1:30 pm
Was a Watercourse Reached?	If YES, Volume Impacting the Watercourse.
Yes No	TBD – This is a natural gas release and impacts to soil will be determined upon excavation and repair.
If a Watercourse was Impacted, Describe Fully.*	
The ninhole leak was located in a dry wash. Please see the attached	Lateral E-3 Subsurface Investigation Report prepared by LT Environmental, Inc.
Describe Cause of Problem and Remedial Action Taken.*	Eateral E-5 Subsurface Investigation Report prepared by E1 Environmental, inc.
pressurized/isolated and is awaiting repair. Final Report Update: Pl potential impacted soil was addressed during initial response.	a dry wash. No liquids were observed at the ground surface. The pipeline has been de- lease see the attached <i>Lateral E-3 Subsurface Investigation Report</i> confirming all
Describe Area Affected and Cleanup Action Taken.*	
Initial excavation and repair of the pipeline is scheduled for 08-12-20 all potential impacted soil was addressed during the initial response.	016. Please see the attached Lateral E-3 Subsurface Investigation Report confirming
regulations all operators are required to report and/or file certain rele public health or the environment. The acceptance of a C-141 report should their operations have failed to adequately investigate and rem	te to the best of my knowledge and understand that pursuant to NMOCD rules and ease notifications and perform corrective actions for releases which may endanger by the NMOCD marked as "Final Report" does not relieve the operator of liability nediate contamination that pose a threat to ground water, surface water, human health port does not relieve the operator of responsibility for compliance with any other
	OIL CONSERVATION DIVISION
1 th up	
Mitch Morris	Approved by Environmental Specialist:
Printed Name: Mitch Morris	
Title: Environmental Specialist	Approval Date: 8/5/17 Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval: 35P6 Approval Attached
Date: 03/07/2017 Phone: 505-632-4708	SAMPIN PLAN/RAK.



LT Environmental, Inc.

848 East Second Avenue Durango, Colorado 81301 T 970.385.1096

January 10, 2017

Mr. Mitch Morris Williams Four Corners LLC 1755 Arroyo Drive Bloomfield, New Mexico 87413

RE: Lateral E-3 Subsurface Investigation Report Williams Four Corners LLC Rio Arriba County, New Mexico

Dear Mr. Morris:

LT Environmental, Inc. (LTE), on behalf of Williams Four Corners LLC (Williams), conducted a subsurface investigation following remediation of soil impacted by a release at the Lateral E-3 pipeline (Site). The purpose of the investigation was to confirm Williams addressed all potential soil impact during initial response actions and, because the release occurred in a dry wash with suspected shallow groundwater, confirm the absence of groundwater at depths where soil impact was originally observed. The investigation was conducted at the request of the New Mexico Oil Conservation Division (NMOCD) to better characterize the extent of the release.

Site Description and History

The Site is in the southeast quarter of the northwest quarter of Section 13, Township 27 North, and Range 3 West in Rio Arriba County, New Mexico, within the headwaters of Arroyo Compañero. as depicted on Figure 1. Arroyo Compañero drains into Largo Canyon, which eventually terminates into the San Juan River approximately 42 miles to the northwest.

On August 9, 2016, Williams personnel discovered a pinhole gas leak during a leak detection survey on the Lateral E-3 natural gas pipeline. Williams reported the release to the NMOCD on an initial *C-141 Release Notification and Corrective Action Form.* The volume of the release was estimated to be 1,646.76 thousand cubic feet (MCF). In response to the release, Williams abandoned approximately 300 feet of the existing pipeline in place and installed a new pipeline directly adjacent to the existing pipeline. Approximately 200 cubic yards of impacted soil were removed and disposed of offsite during the repairs. A composite soil sample from the walls and floor of the excavation was collected on August 16, 2016. Laboratory analytical results indicated no total petroleum hydrocarbons (TPH) or ethylbenzene were detected in the soil sample. Concentrations of benzene (0.12 milligrams per kilograms [mg/kg]), toluene (0.23 mg/kg), and total xylenes (0.3 mg/kg) were detected at concentrations compliant with NMOCD soil standards. Groundwater was not encountered during the repair of the pipeline, which reached a maximum depth of 14 feet below ground surface (bgs).



Morris, M. January 10, 2017 Page 2

Williams attempted to hand auger a borehole down gradient of the excavation to determine groundwater depth; however, the sand was too fine for recovery and hand auguring was unsuccessful.

Soil Sampling

LTE advanced one soil boring directly adjacent to the former release source on December 21, 2016, with a track-mounted Geoprobe[®] direct-push drilling rig operated by Earth Worx Environmental Services. The NMOCD requested that Williams confirm that potential soil impact during initial response actions were addressed and, because the release occurred in a dry wash with suspected shallow groundwater, confirm the absence of groundwater at depths where soil impact was originally observed. A site map with the soil boring location is depicted on Figure 2. The total depth of the soil boring was 20 feet bgs.

Continuous soil samples were collected from the borehole and logged by an LTE geologist using the Unified Soil Classification System (USCS). The intervals from immediately beneath the ground surface and then every two feet thereafter were screened for volatile aromatic hydrocarbons as well as any soil that was stained or had a hydrocarbon odor. Screening was conducted with a photo-ionization detector (PID) equipped with a 10.6 electron volt lamp in accordance with the NMOCD *Guidelines for Remediation of Leaks, Spills and Releases*, August 13, 1993. The soil sample from the bottom of the borehole was collected in pre-cleaned glass jars, labeled with location, date, time, sampler, and method of analysis and immediately placed on ice. The sample was shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Hall Environmental Analytical Laboratory Sciences (HEAL) in Albuquerque, New Mexico, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) using United States Environmental Protection Agency (USEPA) Method 8021 and TPH using USEPA Method 8015 within the required holding times. The borehole was filled with hydrated bentonite from total depth to ground surface upon completion.

Soil Analytical Results

Based on the Site being within 200 feet of a surface water body, the NMOCD ranking criteria triggers the following remediation action levels: 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total BTEX, and 100 mg/kg for total TPH.

Soil samples collected for field analysis during advancement of the soil boring were predominantly composed of pale to dark brown medium to course grained sand in the upper 8 feet of the borehole and transitioned to a sandy fat clay near the bottom of the borehole (20 feet bgs). The lithology decreased in grain size and increased in clay/silt content and plasticity with depth to 20 feet bgs. No visual staining, hydrocarbon odors, and/or elevated field screening results we observed in any of the samples logged in the borehole. The borehole log is included as Attachment 1.





P:Williams Four Comers/GIS/MXD/034016013_LATERAL_E3/034016013_FIG02_SITE.mxd

TABLE

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TABLE 1SOIL ANALYTICAL RESULTS

LATERAL E-3 RIO ARRIBA COUNTY, NEW MEXICO WILLIAMS FOUR CORNERS LLC

Soil Sample ID	Sample Date	Depth (feet)	Vapor (ppm)			Ethylbenze ne (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (GRO + DRO) (mg/kg)	MRO (mg/kg)	Chloride (mg/kg)
BH-1	12/21/2016	20	0	< 0.024	< 0.047	< 0.047	< 0.094	< 0.212	<4.7	<9.6	<14.3	NA	NA
Lat. E-3 Grab	8/16/2016	14	NA	0.12	0.2	< 0.032	0.300	0.650	<3.2	<9.7	<12.9	<48	<30
NMOCD Closur	re Criteria		NE	10	NE	NE	NE	50	NE	NE	100	NE	NE

NOTES:

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

BTEX - Total Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed by EPA method 8021

DRO - diesel range organics analyzed by EPA Modified Method 8015

GRO - gasoline range organics analyzed by EPA Modified Method 8015

mg/kg - milligrams per kilogram

NA - Not Analyzed

NE - Not Established

NMOCD - New Mexico Oil Conservation Division

ppm - parts per million

TPH- total petroleum hydrocarbons (DRO + GRO)



ATTACHMENT 1 BOREHOLE LOG

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ar a fair a f			L.					Ľ	LT Environ 4600 W. 60	" Engineering " Re mental, Inc. th Avenue lorado 80003	mediation
Elevation: Gravel Pac Casing Typ Screen Typ	NA pe: NA		Detector:	Slot:	ni Rae Lit	e de ante		Boring/Well Date: Logged By: Cogged By: Cogg	BH-1 12/21/2016 Josh Adams	WELL COMPLETI Project: Latera Project Number: 03401 Drilled By: Louis Trujille Sampling Method: Continuous Grout: NA Hole Diameter: 2-inch Total Depth: 20'	l E-3 6013 b/Earthworx
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Recovery		Lithology/F	ana ing sa	Well Completion
	M	Ø	NO					SW-SL	NR Sand W/sil+(10) medium to course 10 YR		
	M	Ø	NO		5	4-8		SW-52	NR SAA		
	M M	8	NO		9 10 11 12	- ð-12		SW-SC CH	NR SAA W/more fines fat clay Wisard 1041 nighly plastic		
					13 	· · ·			NR next page		+
	a designed							1	Boring/Well #	BH-1	
---------------------------	---------------------	----------------	---------------	-----------	---------------------	---------------	----------	-----	---	---	---------------------------
-	2	Comp	liance .	Enain	eering "	Remedia	atio	n	Project:	Lateral E-3	
11	12	LTEn	vironn	nental,	Inc.				Project #	034016012	
			AND A COMPANY		and a second second	_			Date	12/21/2016	
Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Reco		- Lith	ology/Remarks	Well Completion
					15		14:479		can lell of a st	Lu KHALCHORT URI	Contraction of the second
	M	0	NO		16	12-16	<u>.</u>	CH	Saperature and the standard stands of a standard stress	t blw 15'+16'carrie well not 50%fines, thenladtocky	-
					17 .	-			- A Crater	NR ·	-
	M	.0	NO		. 18	16-20		CL	10YR4/6 plas	stic well seried	-
	M	.0	NO	BH-1 C	19	-		CH.	Fut day w/son	50% sand 50% fines stic well sorted d (10-15%) course	-
	,			1025	20		i. i			-	
					21					-	-
					22					+	-
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					36					+	
					37					+	

ATTACHMENT 2

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LABORATORY ANALTYICAL REPORT



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

December 29, 2016

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

OrderNo.: 1612C35

Dear Brooke Herb:

RE: Lateral E-3

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/22/2016 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Lab Order 1612C35

Date Reported: 12/29/2016

Analyst: NSB

Analyst: NSB

12/23/2016 9:06:09 PM 29355

Hall Environmental Analysis Laboratory, Inc.

EPA METHOD 8015D: GASOLINE RANGE

Gasoline Range Organics (GRO)

EPA METHOD 8021B: VOLATILES

Surr: 4-Bromofluorobenzene

Surr: BFB

Benzene

Toluene

Ethylbenzene

Xylenes, Total

•,

CLIENT:	Williams Four Corners	Client Sample ID: BH-1									
Project:	Lateral E-3			Collection 1	Date: 12/2	21/2016 10:25:00 A	M				
Lab ID:	1612C35-001	Matrix: S	OIL	Received 1	Date: 12/2	22/2016 7:30:00 AM	1				
Analyses		Result	PQL Qua	l Units	DF	Date Analyzed	Batch				
EPA MET	HOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analy	st: TOM				
Diesel Ra	ange Organics (DRO)	ND	9.6	mg/Kg	1	12/28/2016 5:43:57 P	M 29384				

4.7

68.3-144

0.024

0.047

0.047

0.094

80-120

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

1

1

1

1

1

1

ND

92.4

ND

ND

ND

ND

102

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 4
	ND	Not Detected at the Reporting Limit	Р	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

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Hall Environmental Analysis Laboratory, Inc.

Client:Williams Four CornersProject:Lateral E-3

SampType: LCS		Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Batch ID: 29384	1	R						
Analysis Date: 12/28	8/2016	S	eqNo: 12	243438	Units: mg/K	g		
Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
45 10	50.00	0	89.2	63.8	116			
4.1	5.000		82.6	70	130			
	/	Test	a .					
SampType: MBLK	`	1631	Coue. EF	A wethod	8015WI/D: DIE	esel Range	Organics	
Batch ID: 29384			unNo: 39		8015W/D: Die	esel Range	Organics	
1 31	1	R		9672	Units: mg/K	0	Organics	
Batch ID: 29384 Analysis Date: 12/28	4 B/2016	R	unNo: 39	9672		0	PDLimit	Qual
Batch ID: 29384 Analysis Date: 12/28	4 B/2016	R	unNo: 39 eqNo: 12	9672 243440	Units: mg/K	g		Qual
	Batch ID: 29384 Analysis Date: 12/20 Result PQL S 45 10 4.1	Batch ID: 29384 Analysis Date: 12/28/2016 Result PQL SPK value 45 10 50.00 4.1 5.000	Batch ID: 29384 R Analysis Date: 12/28/2016 S Result PQL SPK value SPK Ref Val 45 10 50.00 0 4.1 5.000 0	Batch ID: 29384 RunNo: 39 Analysis Date: 12/28/2016 SeqNo: 12 Result PQL SPK value SPK Ref Val %REC 45 10 50.00 0 89.2 4.1 5.000 82.6	Batch ID: 29384 RunNo: 39672 Analysis Date: 12/28/2016 SeqNo: 1243438 Result PQL SPK value SPK Ref Val %REC LowLimit 45 10 50.00 0 89.2 63.8 4.1 5.000 82.6 70	Batch ID: 29384 RunNo: 39672 Analysis Date: 12/28/2016 SeqNo: 1243438 Units: mg/K Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 45 10 50.00 0 89.2 63.8 116 4.1 5.000 82.6 70 130	Batch ID: 29384 RunNo: 39672 Analysis Date: 12/28/2016 SeqNo: 1243438 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD 45 10 50.00 0 89.2 63.8 116 4.1 5.000 82.6 70 130 130	Batch ID: 29384 RunNo: 39672 Analysis Date: 12/28/2016 SeqNo: 1243438 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 45 10 50.00 0 89.2 63.8 116 4.1 5.000 82.6 70 130 100

Qualifiers:

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

1612C35

WO#:

Page 2 of 4

29-Dec-16

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Hall Environmental Analysis Laboratory, Inc.

Client:Williams Four CornersProject:Lateral E-3

Sample ID MB-29355	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batc	h ID: 29	355	F	RunNo: 3	9645				
Prep Date: 12/22/2016	Analysis [Date: 12	2/23/2016	S	SeqNo: 1	241869	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.3	68.3	144			
Surr: BFB Sample ID LCS-29355		Гуре: LC		Tes			144 8015D: Gaso	line Rang	e	
	Samp	Гуре: LC h ID: 29	s			PA Method		line Rang	e	
Sample ID LCS-29355	Samp	h ID: 29	S 355	F	tCode: El	PA Method 9645		5	e	
Sample ID LCS-29355 Client ID: LCSS	Samp ⁻ Batc	h ID: 29	S 355 2/23/2016	F	tCode: El	PA Method 9645	8015D: Gaso	5	e RPDLimit	Qual
Sample IDLCS-29355Client ID:LCSSPrep Date:12/22/2016	Samp Batc Analysis [h ID: 29 Date: 12	S 355 2/23/2016	F	tCode: El RunNo: 3 SeqNo: 1	PA Method 9645 241870	8015D: Gaso Units: mg/K	íg		Qual

Qualifiers:

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

29-Dec-16

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WO#: 1612C35

Hall	Environmenta	l Analysis	Laboratory,	Inc.
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Client: Williams Four Corners Project: Lateral E-3

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Sample ID MB-29355	SampT	Гуре: МЕ	BLK	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: 29	355	F	RunNo: 3	9645				
Prep Date: 12/22/2016	Analysis E	Date: 12	2/23/2016	S	SeqNo: 1	241911	Units: mg/k	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			
Sample ID LCS-29355	SampT	Type: LC	s	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch	h ID: 29	355	F	RunNo: 3	9645				
Prep Date: 12/22/2016	Analysis D	Date: 12	2/23/2016	S	SeqNo: 1	241912	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	110	75.2	115			
Toluene	1.0	0.050	1.000	0	102	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.7	78.9	117			
Xylenes, Total	3.0	0.10	3.000	0	98.6	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Qualifiers:

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

1612C35 29-Dec-16

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WO#:

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Analysis 4901 Albuquerque TEL: 505-345-3975 FAX: 50 Website: www.hallenviron	Hawkins NE , NM 87109 5-345-4107	Sam	ple Log-In Cł	ieck L
Client Name: WILLIAMS FOUR CORN	Work Order Number: 1612C	35		RcptNo:	1
Received by/date: / 12/22/1	6				
Logged By: Anne Thorne	12/22/2016 7:30:00 AM	a	one Arm	~	
Completed By: Anne Thorne Reviewed By:	12/22/2016 11:20:24 АМ 17 ГГГ Ш	a	one Am	~	
Chain of Custody	1 Cleo IVO				
1. Custody seals intact on sample bottles?	Yes		No 🗌	Not Present 🗹	
2. Is Chain of Custody complete?	Yes	\checkmark	No 🗌	Not Present	
3. How was the sample delivered?	Courie	<u>ər</u>			
Log In					
4. Was an attempt made to cool the samples?	Yes		No 🗌	NA 🗌	
5. Were all samples received at a temperature of	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	\checkmark	No 🗌		
8. Are samples (except VOA and ONG) properly	y preserved? Yes	\checkmark	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 broker	n? Yes		No 🗹	# of preserved bottles checked	
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	\checkmark	No 🗌	100 Mar 10 Mar 100 Mar	>12 unles
13. Are matrices correctly identified on Chain of 0			No 🗌	Adjusted?	
14. Is it clear what analyses were requested?			No 🛄	Checked by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes		No 🗌		
Special Handling (if applicable)		_			
16. Was client notified of all discrepancies with the	nis order? Yes		No 🗌	NA 🗹	1
Person Notified: By Whom:	Date Date Via: Date	il 📋 Phone	Fax	In Person	
Regarding: Client Instructions:			andra d dome av ser and del		
17. Additional remarks:					-
18. <u>Cooler Information</u> Cooler No Temp °C Condition Se	al Intact Seal No Seal Da	te Siar	ned By	1	
1 1.0 Good Yes		io oigi	iou Dy	-	

C ent:	hain Will	of-Cl	Fair Comers	Turn-Around I≫Standard	🗆 Rush																
				Project Name	e:				No. of Concession, Name		14747	v.hal	lenv	iron	ment	tal.co	om				
ailing	Address	1775	5 Arroyo Dr.	Latera	1 E-3			49	01 H								M 87	109			
		Bloor	field NM	Project #:			1)5-34							4107				
one	#: 50		2-4442	1							-	-			-	uest	State of the local division of the local div				
nail o	r Fax#:			Project Mana	ger:		-	(ylı	(Q					0 ₄)							
√QC ′Star	Package: dard		Level 4 (Full Validation)	Brooke	Herb		+-TMB's (8021)	TPH (Gas only)	(DRO /-MRO)			SIMS)		PO4,SC	PCB's						
cred	itation AP	□ Othe	r	Sampler: 50	sh Ada	MS	-FMB'		0/0	8.1)	14.1)	8270 5		3,NO2,	/ 8082		1				r N)
	(Type)				perature:			+ 1	GRO	d 41	d 50	or	als	NON,	des		V0/				X o
Date	Time	Matrix	Sample Request ID			HEAL NO.	RTEX +-MTBE	BTEX + MTBE	TPH 8015B	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or	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)
21-6	1625	Seil	BH-1	(1) 40Z	6001	105-	X		X												
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21-16		Get	r adam	Anista	6 Wate	12/21/16 1255			с. _с		ja	krh Ida	ne ms	C	1+e	nu	. CO	m			
ate:	Time:	Relinquish	ed by:	Received by.	hu)	Date' Time 12/22/14 0130	6	Sile Sile	et	R		4	41	lia	na si		. CO				

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



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

August 18, 2016

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

RE: Lat. E-3 Grab Bottom of Ditch

OrderNo.: 1608980

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 1 sample(s) on 8/17/2016 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Er	nvironmental Analysis	Labora	atory, Inc.			Lab Order 1608980 Date Reported: 8/18/201	.6
CLIENT: Project: Lab ID:	Williams Field Services Lat. E-3 Grab Bottom of Ditch 1608980-001	Matrix:	MEOH (SOIL)	Collection	Date: 8/1	t. E-3 Grab 6/2016 12:50:00 PM 7/2016 8:20:00 AM	
Analyses		Result	PQL Qual	Units	DF	Date Analyzed	Batch
EPA MET	THOD 300.0: ANIONS					Analyst:	MRA
Chloride		ND	30	mg/Kg	20	8/17/2016 10:53:14 AM	27036
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANIC	S			Analyst:	TOM
Diesel Ra	ange Organics (DRO)	ND	9.7	mg/Kg	1	8/17/2016 10:12:31 AM	27028
Motor Oil	I Range Organics (MRO)	ND	48	mg/Kg	1	8/17/2016 10:12:31 AM	27028
Surr: E	ONOP	85.9	70-130	%Rec	1	8/17/2016 10:12:31 AM	27028
EPA MET	HOD 8015D: GASOLINE RANG	E				Analyst:	NSB
Gasoline	Range Organics (GRO)	ND	3.2	mg/Kg	1	8/17/2016 11:23:18 AM	27006
Surr: E	3FB	84.0	68.3-144	%Rec	1	8/17/2016 11:23:18 AM	27006
EPA MET	HOD 8021B: VOLATILES					Analyst:	NSB
Benzene	E	0.12	0.016	mg/Kg	1	8/17/2016 11:23:18 AM	27006
Toluene		0.23	0.032	mg/Kg	1	8/17/2016 11:23:18 AM	27006
Ethylben	zene	ND	0.032	mg/Kg	1	8/17/2016 11:23:18 AM	27006
Xylenes,		0.30	0.064	mg/Kg	1	8/17/2016 11:23:18 AM	27006
Surr: 4	4-Bromofluorobenzene	103	80-120	%Rec	1	8/17/2016 11:23:18 AM	27006

Analytical Report

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 4
	ND	Not Detected at the Reporting Limit	Р	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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1608980

Page 2 of 4

18-Aug-16

Client:	Willian	ns Field Serv	vices								
Project:	Lat. E-	3 Grab Botto	om of D	oitch							
Sample ID	LCS-27019	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 27	019	F	RunNo: 3	6556				
Prep Date:	8/16/2016	Analysis D	ate: 8/	17/2016	S	SeqNo: 1	132223	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.5		5.000		90.6	70	130			
Sample ID	MB-27019	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 27	019	F	RunNo: 3	6556				
Prep Date:	8/16/2016	Analysis D	ate: 8/	17/2016	5	SeqNo: 1	132224	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.9		10.00		89.4	70	130			
Sample ID	LCS-27028	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID Client ID:			ype: LC 1D: 27			tCode: E RunNo: 3		8015M/D: Di	esel Rang	e Organics	
	LCSS		ID: 27	028	F		6557	8015M/D: Di Units: mg/M		e Organics	
Client ID:	LCSS	Batch	ID: 27	028 17/2016	F	RunNo: 3 SeqNo: 1	6557			e Organics RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range C	LCSS 8/17/2016	Batch Analysis D Result 52	alD: 27 ate: 8/	028 17/2016 SPK value 50.00	F	RunNo: 3 SeqNo: 1 %REC 105	6557 132248 LowLimit 62.6	Units: mg/F HighLimit 124	(g		Qual
Client ID: Prep Date: Analyte	LCSS 8/17/2016	Batch Analysis D Result	ate: 8 / PQL	028 17/2016 SPK value	F S SPK Ref Val	RunNo: 3 SeqNo: 1 %REC	6557 132248 LowLimit	Units: mg/F HighLimit	(g		Qual
Client ID: Prep Date: Analyte Diesel Range C	LCSS 8/17/2016 Drganics (DRO)	Batch Analysis D Result 52 4.8	ate: 8 / PQL	028 17/2016 SPK value 50.00 5.000	F S SPK Ref Val 0	RunNo: 3 SeqNo: 1 %REC 105 96.2	6557 132248 LowLimit 62.6 70	Units: mg/k HighLimit 124	S Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID	LCSS 8/17/2016 Drganics (DRO)	Batch Analysis D Result 52 4.8 SampT	ate: 8/ PQL 10	028 17/2016 SPK value 50.00 5.000 BLK	F S SPK Ref Val 0 Tes	RunNo: 3 SeqNo: 1 %REC 105 96.2	6557 132248 LowLimit 62.6 70 PA Method	Units: mg/ / HighLimit 124 130	S Sg %RPD	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID	LCSS 8/17/2016 Drganics (DRO) MB-27028 PBS	Batch Analysis D Result 52 4.8 SampT	ate: 8 / PQL 10 ype: ME 1D: 27	028 17/2016 SPK value 50.00 5.000 3LK 028	F S SPK Ref Val 0 Tes F	RunNo: 3 SeqNo: 1 %REC 105 96.2 tCode: E	6557 132248 LowLimit 62.6 70 PA Method 6557	Units: mg/ / HighLimit 124 130	Kg %RPD esel Rang	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID:	LCSS 8/17/2016 Drganics (DRO) MB-27028 PBS	Batch Analysis D Result 52 4.8 SampT Batch	ate: 8 / PQL 10 ype: ME 1D: 27	028 17/2016 SPK value 50.00 5.000 3LK 028 17/2016	F S SPK Ref Val 0 Tes F	RunNo: 3 SeqNo: 1 %REC 105 96.2 tCode: E RunNo: 3 SeqNo: 1	6557 132248 LowLimit 62.6 70 PA Method 6557	Units: mg/k HighLimit 124 130 8015M/D: Die	Kg %RPD esel Rang	RPDLimit	Qual
Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date:	LCSS 8/17/2016 Drganics (DRO) MB-27028 PBS 8/17/2016	Batch Analysis D Result 52 4.8 SampT Batch Analysis D	PQL 10 90 10 90 10 10 10 10 10 10 10 10 10 10 10 10 10	028 17/2016 SPK value 50.00 5.000 3LK 028 17/2016	F SPK Ref Val 0 Tes F S	RunNo: 3 SeqNo: 1 %REC 105 96.2 tCode: E RunNo: 3 SeqNo: 1	6557 132248 2.0wLimit 62.6 70 PA Method 6557 132249	Units: mg/k HighLimit 124 130 8015M/D: Dia Units: mg/k	Kg %RPD esel Range	RPDLimit e Organics	
Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C	LCSS 8/17/2016 Drganics (DRO) MB-27028 PBS 8/17/2016	Batch Analysis D Result 52 4.8 SampT Batch Analysis D Result	PQL 10: 27 ate: 8/ PQL 10 ype: ME 10: 27 ate: 8/ PQL	028 17/2016 SPK value 50.00 5.000 3LK 028 17/2016	F SPK Ref Val 0 Tes F S	RunNo: 3 SeqNo: 1 %REC 105 96.2 tCode: E RunNo: 3 SeqNo: 1	6557 132248 2.0wLimit 62.6 70 PA Method 6557 132249	Units: mg/k HighLimit 124 130 8015M/D: Dia Units: mg/k	Kg %RPD esel Range	RPDLimit e Organics	

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

WO#: 1608980

18-Aug-16

	s Field Serv Grab Botto		itch							
Sample ID MB-27006	MB-27006 SampType: MBLK					PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch ID: 27006				RunNo: 3	6570				
Prep Date: 8/16/2016	Analysis D	ate: 8/	17/2016	S	SeqNo: 1	132895	Units: mg/k	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 850	5.0	1000		84.7	68.3	144			
Sample ID LCS-27006	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	D: 27	006	F	RunNo: 3	6570				
Prep Date: 8/16/2016	Analysis D	ate: 8/	17/2016	S	SeqNo: 1	132896	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	80	120			
Surr: BFB	900		1000		90.3	68.3	144			

Qualifiers:

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

Page 3 of 4

Reporting Detection Limit

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Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

0.99

3.0

1.1

0.050

0.10

1.000

3.000

1.000

	s Field Ser Grab Botto		itch							
Sample ID MB-27006	ble ID MB-27006 SampType: MBLK TestCode: EPA Method 8021B: Volatiles									
Client ID: PBS	Batc	h ID: 27	006	F	RunNo: 3	6570				
Prep Date: 8/16/2016	Analysis E	Date: 8/	17/2016	S	SeqNo: 1	132930	Units: mg/M	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	80	120			
Sample ID LCS-27006	SampT	Type: LC	s	Tes	tCode: E	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: 27	006	F	RunNo: 3	6570				
Prep Date: 8/16/2016	Analysis D	Date: 8/	17/2016	5	SeqNo: 1	132931	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.2	75.3	123			
Toluene	0.92	0.050	1.000	0	92.1	80	124			

0

0

98.5

100

105

82.8

83.9

80

121

122

120

Qualifiers:

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

1608980

WO#:

Page 4 of 4

18-Aug-16

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmenta Ali TEL: 505-345-397 Website: www.h	4901 buquerqu 5 FAX: 5	Hawkin e, NM 82 05-345	NE 7109 Sam	ple Log-In C	heck List
Client Name: WILLIAMS FIELD SERVI	Work Order Numbe	r: 1608	980		ReptNo:	1
Received by/date: AJ	08/17/16					
Logged By: Michelle Garcia	8/17/2016 8:20:00 AM	8		-Mirel Go	muin	
Completed By: Michelle Garcia	8/17/2016 8:49:30 AN	8		-Mirus Go Mirus Go	mun	
Reviewed By: QJ	08/17/16					
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?		Cour	ier			
Log In						
4. Was an attempt made to cool the samples'	?	Yes	Y	No	NA 🗌	
5. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes	V	No	NA	
6. Sample(s) in proper container(s)?		Yes	V	No 🗌		
7. Sufficient sample volume for indicated test(s)?	Yes	V	No 🗌		
8. Are samples (except VOA and ONG) prope	rly 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 brok	en?	Yes		No 🗹	# of preserved bottles checked	99999999999999999999999999999999999999
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	~	No 🗆	for pH: (<2 0	r >12 unless note
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	V	No 🗌	Checked by:	
Special Handling (if applicable)						
16, Was client notified of all discrepancies with	this order?	Yes		No 🗌	NA 🗹	
Person Natified:	Date					
By Whom:	Via:	eMa	il 🗌 f	hone 🗌 Fax	In Person	
Regarding:				And Ballionici - Control - European Automatica		
Client Instructions:						
17. Additional remarks:						
18. Cooler Information						
	eal Intact Seal No	Seal Da	ite	Signed By		
1 1.4 Good Ye	G					

			stody Record	Turn-Around	Time:	Same Day 8-17-16				H	1		F		ТС	20	NF	ME	NT	-	
lient:	WF	5		□ Standard	Rush	8-17-16													TC		
				Project Name	ə:													1.			·
ailing	Address	: 128	CR 4900	lat 6	-2 6CB	Bally OF-lity	www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109														
		100	Im 87413	Project #:	J OVAD	Botton OF ditch				5-34				Fax							
			-4708	and the second				ie	1. 50	5-54	0-0:	-	-	ysis			-				
			Morris@ williens.com	Project Mana	der:																
	Package:	1.100		i rejeccinane	90		021)	s only)	MR			-		SO.	B's						
I Stan			Level 4 (Full Validation)	mitch	morr:5		TMB'6 (8021)	TPH (Gas	102			SIMS)		PO	PCB'						
ccredi	itation						MB	H	DF	=	÷	70 S		VO ₂ ,	8082						7
NEL	AP	□ Othe	r	Sampler: Morgen On Ice: NYes □ No		+	+	RO	t18.	504.	r 82	0	03,1	s/8		(A)	J			or	
EDD	(Type)	,		Sample Tem	perature:	1.400	MTBE	MTBE	0	po	po	0 0	etal	N'N	cide	A	>	10			Z
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	+	BTEX + MI	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides /	8260B (VOA)	8270 (Semi-VOA)	- h loride			Air Bubbles (Y or N)
						1608980	BTEX	BT	TP	TP	B	PA	RC	Ani	808	826	827	V			Air
416	12:50	501	Lat. E-3 Grab	1-402	('00'	-001	X		X									X			
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ate:	Time:		y Killon	Received by:	Wast	Date Time 8/14/14 1717	Rem	arks	5:												
ate:	Time:	Relinquish	ed by:	Received by:	Jum o	8 +6 16 0820															
14 16		samples subr	mitted to Hall Environmental may be subc	ontracted to other a	ccredited laboratorie	s. This serves as notice of this	possib	ility. A	Any su	b-cont	racted	data	will be	e clear	ly nota	ated or	n the a	inalytic	al repor	t.	

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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.

API No.

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

LOCATION OF RELEASE

Unit Letter M	Section 1	Township 26N	Range 5W	Feet from the	North/South Line	Feet from the	East/West Line	County Rio Arriba

Latitude <u>36.50976° N</u> Longitude -<u>107.31513° W</u>

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?	If YES, To Whom? Vanessa Fields	s via Telephone
By Whom? Mitch Morris	Date and Hour 10/07/2016 ~9:22 a	m STORT 3
Was a Watercourse Reached?	If YES, Volume Impacting the Wa Not Applicable	tercover CONS. DIV DIST. 3
If a Watercourse was Impacted, Describe Fully.*		SEP 1 2017
Not Applicable		
Describe Cause of Problem and Remedial Action Taken.*		
A routine leak survey crew identified a leak on the Jicarilla 150 #1 pipe	line. The line was immediately isolated	and de-pressurized, stopping the leak.
Describe Area Affected and Cleanup Action Taken.*		
The pipeline has been repaired. This leak was discovered in late 2016, so of Way surrounded by earthen berms. Samples were obtained in 2017 of as NMOCD was unable to witness. Confirmation soil samples are attacted in the provided of the p	on both the excavation as well as the soi ched to this report. Please see the addition to the best of my knowledge and understate e notifications and perform corrective ac	l pile under Hobson Sandoval's supervision, onal information attached to this report. and that pursuant to NMOCD rules and tions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by should their operations have failed to adequately investigate and remedi or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	iate contamination that pose a threat to g	ground water, surface water, human health
	OIL CONSERV	VATION DIVISION
Mitch Morris	Approved by Environmental Speciali	st: land N
Printed Name: Mitch Morris	/	-
Title: Environmental Specialist	Approval Date: 9/13/17	Expiration Date:
E-mail Address: Mitch.Morris@williams.com	Conditions of Approval:	Attached
Date: 08/01/2017 Phone: 505-632-4708		
Date: 08/01/2017 Phone: 505-632-4708 Attach Additional Sheets If Necessary HNVF/6322	38319	$(\overline{17})$

Remediation Excavation and Sampling Form

Site Name	Jicarilla 150	#1			
Excavation Dime	nsions (feet)				
20	Length	10	Width	4	Depth

Excavation Diagram and Sample Locations

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



Composite soil sample locations



Sample Information

OCD Witness Sampling Yes or No Agency(s) Representative(s)

Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
1706417-001	6/7/2017	Composite	Sidewall Composite	
1705C39-001	5/23/2017	Composite	Excavated soil composite	
1705C39-002	5/23/2017	Composite	Excavated soil composite	

Ranking Score Determination
Legal (Unit, Sec, Twn, Rng) <u>SW 14</u> Sec. 1 T2C N - R SW GPS Coordinates 36, 5097, -107, 31,51

Ranking Score based on NMOCD Guidelines for Remediation of Leaks, Spllis, 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:	186	DTGW		\bigcirc
Depth to Grou	indwater	<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. 1

Notes:	No	water	Severs	win	i.	1,000	ff,	
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Banking Banking Marking	Wellhead Protection Area	<1000 from a water source; or <200 feet	from a private domest	s water source
Ranking Score (circle one) Yes → 20 / No →Q	Ranking Score (circle one)	Yes → 20	No ->	0,2

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. intermittert Stream

to

030 Notes: >1,000/horizontal feet **Distance to Surface** <200 horizontal feet 200-1,000 Water Body 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 5,000,mg/kg 1,000 mg/kg Ranking Completed by (print and sign) Date 11-8-2016

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 Anal	ysis Labora	tory, Inc.			o Order 1706417 te Reported: 6/9/2017
CLIENT: Williams Field Services			Client Sample	в ID: Лс 15	0 #1 Sidewalls
Project: Jic 150 #1 Line Leak			Collection I	ate: 6/7/20	17 11:35:00 AM
Lab ID: 1706417-001	Matrix:	SOIL	Received I	ate: 6/8/20	17 7:15:00 AM
Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL R	ANGE ORGANIC	s			Analyst: TOM
Diesel Range Organics (DRO)	19	9.7	mg/Kg	1	6/8/2017 10:27:25 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/8/2017 10:27:25 AM
Surr: DNOP	88.5	70-130	%Rec	1	6/8/2017 10:27:25 AM
EPA METHOD 8015D: GASOLINE F	ANGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	6/8/2017 11:58:41 AM
Surr: BFB	132	54-150	%Rec	1	6/8/2017 11:58:41 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	6/8/2017 11:58:41 AM
Toluene	ND	0.039	mg/Kg	1	6/8/2017 11:58:41 AM
Ethylbenzene	ND	0.039	mg/Kg	1	6/8/2017 11:58:41 AM
Xylenes, Total	ND	0.077	mg/Kg	1	6/8/2017 11:58:41 AM
Surr: 4-Bromofluorobenzene	127	66.6-132	%Rec	1	6/8/2017 11:58:41 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	98	30	mg/Kg	20	6/8/2017 1:01:14 PM

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

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Qualifiers: * Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range J Analyte detected below quantitation limits Page 1 of 6

Analytical Report

- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Hall Environmental Analys	sis Labora	tory, In	IC.			Order 1706417 Reported: 6/9/2017
CLIENT: Williams Field Services			C	lient Sample	e ID: Jic 150	#1 Bottom
Project: Jic 150 #1 Line Leak				Collection I	Date: 6/7/201	7 11:40:00 AM
Lab ID: 1706417-002	Matrix:	SOIL		Received I	Date: 6/8/201	7 7:15:00 AM
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S				Analyst: TOM
Diesel Range Organics (DRO)	32	9.5		mg/Kg	1	6/8/2017 10:49:44 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/8/2017 10:49:44 AM
Surr: DNOP	91.3	70-130		%Rec	1	6/8/2017 10:49:44 AM
EPA METHOD 8015D: GASOLINE RA	NGE					Analyst: NSB
Gasoline Range Organics (GRO)	4.7	3.6		mg/Kg	1	6/8/2017 12:22:41 PM
Surr: BFB	153	54-150	S	%Rec	1	6/8/2017 12:22:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/8/2017 12:22:41 PM
Toluene	ND	0.036		mg/Kg	1	6/8/2017 12:22:41 PM
Ethylbenzene	ND	0.036		mg/Kg	1	6/8/2017 12:22:41 PM
Xylenes, Total	0.23	0.072		mg/Kg	1	6/8/2017 12:22:41 PM
Surr: 4-Bromofluorobenzene	129	66.6-132		%Rec	1	6/8/2017 12:22:41 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	30		mg/Kg	20	6/8/2017 1:38:27 PM

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

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- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- Analyte detected below quantitation limits Page 2 of 6 J

Analytical Report

- Р Sample pH Not In Range
- RL **Reporting Detection Limit**
- Sample container temperature is out of limit as specified
- W



May 26, 2017 Mitch Morris Williams Field Services 1755 Arroyo Dr., Bloomfield, NM 87413 TEL: (505) 632-4442 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Jic 150 #1 Land Farm

OrderNo.: 1705C39

Dear Mitch Morris:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/24/2017 for the analyses presented in the following report.

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

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

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

Sincerely,

Andia

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analys	is Labora	tory, In	c.			Analytical Report Lab Order 1705C39 Date Reported: 5/26/20	17
CLIENT: Williams Field Services			C	lient Samp	le ID: Jic	150 #1 Land Farm Co	mp S-1
Project: Jic 150 #1 Land Farm				Collection	Date: 5/2	23/2017 2:00:00 PM	
Lab ID: 1705C39-001	Matrix:	MEOH (SO	OIL)	Received	Date: 5/2	4/2017 7:15:00 AM	
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	LGT
Chloride	ND	30		mg/Kg	20	5/24/2017 3:19:40 PM	31936
EPA METHOD 8015M/D: DIESEL RANG		6				Analyst	TOM
Diesel Range Organics (DRO)	400	9.3		mg/Kg	1	5/25/2017 8:38:30 AM	31943
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/25/2017 8:38:30 AM	31943
Surr: DNOP	104	70-130		%Rec	1	5/25/2017 8:38:30 AM	31943
EPA METHOD 8015D: GASOLINE RAN	GE					Analyst	NSB
Gasoline Range Organics (GRO)	50	4.0		mg/Kg	1	5/24/2017 6:58:13 PM	G43026
Surr: BFB	333	54-150	S	%Rec	1	5/24/2017 6:58:13 PM	G43026
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.020		mg/Kg	1	5/24/2017 6:58:13 PM	B43026
Toluene	ND	0.040		mg/Kg	1	5/24/2017 6:58:13 PM	B43026
Ethylbenzene	ND	0.040		mg/Kg	1	5/24/2017 6:58:13 PM	B43026
Xylenes, Total	ND	0.080		mg/Kg	1	5/24/2017 6:58:13 PM	B43026
Surr: 4-Bromofluorobenzene	133	66.6-132	S	%Rec	1	5/24/2017 6:58:13 PM	B43026

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 7
	ND	Not Detected at the Reporting Limit	Р	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 Analys	is Labora	tory, In	c.			Analytical Report Lab Order 1705C39 Date Reported: 5/26/20	17
CLIENT: Williams Field Services			C	· ·		150 #1 Land Farm Co	omp N-2
Project: Jic 150 #1 Land Farm Lab ID: 1705C39-002	Matrix:	MEOH (SC	DIL)			3/2017 2:05:00 PM 4/2017 7:15:00 AM	
Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	LGT
Chloride	ND	30		mg/Kg	20	5/24/2017 3:32:05 PM	31936
EPA METHOD 8015M/D: DIESEL RANG	GE ORGANIC	S				Analyst	TOM
Diesel Range Organics (DRO)	600	9.7		mg/Kg	1	5/25/2017 9:00:56 AM	31943
Motor Oil Range Organics (MRO)	61	48		mg/Kg	1	5/25/2017 9:00:56 AM	31943
Surr: DNOP	107	70-130		%Rec	1	5/25/2017 9:00:56 AM	31943
EPA METHOD 8015D: GASOLINE RAN	IGE					Analyst	NSB
Gasoline Range Organics (GRO)	93	3.6		mg/Kg	1	5/24/2017 7:22:12 PM	G43026
Surr: BFB	1020	54-150	S	%Rec	1	5/24/2017 7:22:12 PM	G43026
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.018		mg/Kg	1	5/24/2017 7:22:12 PM	B43026
Toluene	ND	0.036		mg/Kg	1	5/24/2017 7:22:12 PM	B43026
Ethylbenzene	ND	0.036		mg/Kg	1	5/24/2017 7:22:12 PM	B43026
Xylenes, Total	ND	0.071		mg/Kg	1	5/24/2017 7:22:12 PM	B43026
Surr: 4-Bromofluorobenzene	139	66.6-132	S	%Rec	1	5/24/2017 7:22:12 PM	B43026

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Refe	r to th	e QC Summary report and sample login checklis	st for flagg	ged QC data and preservation inform	ation.
Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method	Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	Daga 2 of 7
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	Page 2 of 7
	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: Project:		ams Field Services 50 #1 Land Farm						-		
Sample ID	MB-31936	SampType: MBLK		Test	Code: El	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch ID: 31936		R	unNo: 4	3028				
Prep Date:	5/24/2017	Analysis Date: 5/24/	2017	S	eqNo: 1	355112	Units: mg/K	g		
Analyte Chloride		Result PQL SF ND 1.5	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID	LCS-31936	SampType: LCS		Test	Code: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch ID: 31936		R	unNo: 4	3028				
Prep Date:	5/24/2017	Analysis Date: 5/24/2	2017	S	eqNo: 1	355113	Units: mg/K	g		
Analyte		Result PQL SF	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.4	90	110			

Qualifiers:

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

Page 3 of 7

26-May-17

WO#: 1705C39

CI! (

Hall Environmental Analysis Laboratory, Inc.

Client:	Williams	Field Serv	vices								
Project:	Jic 150 #	1 Land Fa	rm								
Sample ID	LCS-31943	SampT	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	h ID: 31	943	F	RunNo: 4	3051				
Prep Date:	5/24/2017	Analysis E	Date: 5/	/25/2017	5	SeqNo: 1	354741	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	42	10	50.00	0	84.8	73.2	114			
Surr: DNOP		4.8		5.000		95.2	70	130			
Sample ID	MB-31943	SampT	Гуре: М	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	h ID: 31	943	F	RunNo: 4	3051				
Prep Date:	5/24/2017	Analysis D	Date: 5/	25/2017	5	SeqNo: 1	354742	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Motor Oil Rang	ge Organics (MRO)	ND	50								
Surr: DNOP		9.6		10.00		96.1	70	130			
Sample ID	LCS-31932	SampT	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch	h ID: 31	932	F	RunNo: 4	3051				
Prep Date:	5/24/2017	Analysis D	Date: 5/	25/2017	5	SeqNo: 1	355829	Units: %Red	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.5		5.000		89.3	70	130			
Sample ID	MB-31932	SampT	уре: М	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch	h ID: 31	932	F	RunNo: 4	3051				
Prep Date:	5/24/2017	Analysis D	Date: 5/	25/2017	5	SeqNo: 1	355830	Units: %Red	C		
		D	DOI	CDK uslus	SPK Ref Val	%REC	LowLimit	HighLimit		RPDLimit	Qual
Analyte		Result	PQL	SPK value	SFR Rei Vai	70REC	LOWLITTIL	HIGHLIMIL	%RPD	RPDLIMIL	Quai

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Page 4 of 7

1705C39

Client:

Project:

Hall Environmental Analysis Laboratory, Inc.

Williams Field Services Jic 150 #1 Land Farm

Sample ID MB-31921	SampTy	ype: MI	BLK	Test	Code: El	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batch	ID: 31	921	R	unNo: 4	3026				
Prep Date: 5/23/2017	Analysis Da	ate: 5/	24/2017	S	eqNo: 1	354470	Units: %Re	C		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		97.8	54	150			
Sample ID LCS-31921	SampTy	ype: LC	s	Test	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: 31	921	R	unNo: 4	3026				
Prep Date: 5/23/2017	Analysis Da	ate: 5/	24/2017	S	eqNo: 1	354471	Units: %Ree	C		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	54	150			
Sample ID RB	SampTy	ype: MI	BLK	Test	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	ID: G4	3026	R	unNo: 4	3026				
Prep Date:	Analysis Da	ate: 5/	24/2017	S	eqNo: 1	354482	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	54	150			
Sample ID 2.5UG GRO LCS	SampTy	ype: LC	s	Test	Code: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: G4	3026	R	unNo: 4	3026				
Prep Date:	Analysis Da	ate: 5/	24/2017	S	eqNo: 1	354483	Units: mg/K	q		
								0		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	Result 24		25.00		%REC 96.3	76.4	125		RPDLimit	Qual
	Result	PQL		SPK Ref Val	%REC				RPDLimit	Qual
Gasoline Range Organics (GRO)	Result 24 1100	PQL 5.0	25.00 1000	SPK Ref Val 0	%REC 96.3 112	76.4 54	125	%RPD		Qual
Gasoline Range Organics (GRO) Surr: BFB	Result 24 1100 S SampTy	PQL 5.0	25.00 1000	SPK Ref Val 0 Test	%REC 96.3 112	76.4 54 PA Method	125 150	%RPD		Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS	Result 24 1100 S SampTy	PQL 5.0 ype: MS ID: G4	25.00 1000 3 3026	SPK Ref Val 0 Test R	%REC 96.3 112 Code: E	76.4 54 PA Method 3026	125 150	%RPD		Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I	Result 24 1100 S SampTy Far Batch	PQL 5.0 ype: MS ID: G4	25.00 1000 3 13026 124/2017	SPK Ref Val 0 Test R	%REC 96.3 112 Code: EF unNo: 4	76.4 54 PA Method 3026	125 150 8015D: Gaso	%RPD		Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO)	Result 24 1100 S SampTy Far Batch Analysis Da Result 72	PQL 5.0 ype: MS ID: G4 ate: 5/	25.00 1000 3026 224/2017 SPK value 20.11	SPK Ref Val 0 Test R S	%REC 96.3 112 Code: EF unNo: 4: eqNo: 1: %REC 111	76.4 54 PA Method 3026 3354485 LowLimit 77.8	125 150 8015D: Gaso Units: mg/K HighLimit 128	%RPD	e	Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte	Result 24 1100 S SampTy Far Batch Analysis Da Result	PQL 5.0 ype: MS ID: G4 ate: 5/ PQL	25.00 1000 3 3026 24/2017 SPK value	SPK Ref Val 0 Test R SPK Ref Val	%REC 96.3 112 Code: Ef unNo: 4: eqNo: 1: %REC	76.4 54 PA Method 3026 354485 LowLimit	125 150 8015D: Gaso Units: mg/K HighLimit	%RPD	e	
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO)	Result 24 1100 S SampTy Far Batch Analysis Da Result 72 2900	PQL 5.0 ype: MS ID: G4 ate: 5/ PQL 4.0	25.00 1000 3 3026 24/2017 SPK value 20.11 804.5	SPK Ref Val 0 Test R S SPK Ref Val 49.80	%REC 96.3 112 Code: El unNo: 4: eqNo: 1: %REC 111 355	76.4 54 PA Method 3026 354485 LowLimit 77.8 54	125 150 8015D: Gaso Units: mg/K HighLimit 128	%RPD	e RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB	Result 24 1100 S SampTy Far Batch Analysis Da Result 72 2900 SD SampTy	PQL 5.0 ype: MS ID: G4 ate: 5/ PQL 4.0	25.00 1000 3 3026 24/2017 SPK value 20.11 804.5	SPK Ref Val 0 Test R SPK Ref Val 49.80 Test	%REC 96.3 112 Code: El unNo: 4: eqNo: 1: %REC 111 355	76.4 54 PA Method 3026 354485 LowLimit 77.8 54 PA Method	125 150 8015D: Gaso Units: mg/K HighLimit 128 150	%RPD	e RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS	Result 24 1100 S SampTy Far Batch Analysis Da Result 72 2900 SD SampTy	PQL 5.0 ype: MS ID: G4 ate: 5/ PQL 4.0 ype: MS ID: G4	25.00 1000 3 3026 24/2017 SPK value 20.11 804.5 30 43026	SPK Ref Val 0 Test 8 SPK Ref Val 49.80 Test R	%REC 96.3 112 Code: EF unNo: 44 eqNo: 13 %REC 111 355 Code: EF	76.4 54 PA Method 3026 354485 LowLimit 77.8 54 PA Method 3026	125 150 8015D: Gaso Units: mg/K HighLimit 128 150	%RPD	e RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I	Result 24 1100 S SampTy Far Batch Analysis Da Result 72 2900 SD SampTy Far Batch	PQL 5.0 ype: MS ID: G4 ate: 5/ PQL 4.0 ype: MS ID: G4	25.00 1000 5 13026 124/2017 SPK value 20.11 804.5 SD 13026 124/2017	SPK Ref Val 0 Test 8 SPK Ref Val 49.80 Test R	%REC 96.3 96.3 112 Code: Ef unNo: 4: eqNo: 1: %REC 111 3555 Code: Ef unNo: 4: eqNo: 1: %REC 111 3555 Code: Ef unNo: 4: eqNo: 1:	76.4 54 PA Method 3026 354485 LowLimit 77.8 54 PA Method 3026	125 150 8015D: Gaso Units: mg/K HighLimit 128 150 8015D: Gaso	%RPD	e RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID 1705C39-001AMS Client ID: Jic 150 #1 Land I Prep Date:	Result 24 1100 S SampTy Far Batch Analysis Da Result 72 2900 SD SampTy Far Batch Analysis Da	PQL 5.0 ID: G4 ate: 5/ PQL 4.0 Vype: MS ID: G4 ate: 5/	25.00 1000 5 13026 124/2017 SPK value 20.11 804.5 SD 13026 124/2017	SPK Ref Val 0 Test R SPK Ref Val 49.80 Test R S	%REC 96.3 96.3 112 Code: Ef unNo: 4: eqNo: 1: %REC 111 3555 Code: Ef unNo: 4: eqNo: 1: %REC 111 3555 Code: Ef unNo: 4: eqNo: 1:	76.4 54 PA Method 3026 354485 LowLimit 77.8 54 PA Method 3026 354486	125 150 8015D: Gaso Units: mg/K HighLimit 128 150 8015D: Gaso Units: mg/K	iline Rang %RPD %RPD	e RPDLimit e	Qual S

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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WO#: 1705C39

26-May-17

Hall Environmental Analysis Laboratory, Inc.

Client: Project:		Field Serv 1 Land Fai									
Sample ID	MB-31921	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch	n ID: 31	921	RunNo: 43026						
Prep Date:	5/23/2017	Analysis D	ate: 5/	/24/2017	S	SeqNo: 1	354496	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bror	nofluorobenzene	1.2		1.000		117	66.6	132			
Sample ID	LCS-31921	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	1D: 31	921	F	RunNo: 4	3026				
Prep Date:	5/23/2017	Analysis D	ate: 5/	24/2017	S	SeqNo: 1	354497	Units: %Re	с		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.3		1.000		127	66.6	132			
Sample ID	RB	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batch	ID: B4	3026	F	RunNo: 4	3026				
Prep Date:		Analysis D	ate: 5/	24/2017	S	SeqNo: 1	354508	Units: mg/k	٢g		
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-Bron	nofluorobenzene	1.1		1.000		115	66.6	132			
Sample ID	100NG BTEX LCS	SampT	ype: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batch	ID: B4	3026	F	RunNo: 4	3026				
Prep Date:		Analysis D	ate: 5/	24/2017	S	SeqNo: 1	354509	Units: mg/k	g		÷
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.025	1.000	0	102	80	120			
Toluene		1.0	0.050	1.000	0	103	80	120			
Ethylbenzene		1.0	0.050	1.000	0	104	80	120			
Xylenes, Total		3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bron	nofluorobenzene	1.2		1.000		116	66.6	132			
Sample ID	1705C39-002AMS	SampT	ype: MS	6	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	Jic 150 #1 Land Fa		ID: B4		F	aunNo: 4	3026				
Prep Date:		Analysis D	ate: 5/	24/2017	S	SeqNo: 1	354512	Units: mg/k	g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.74	0.018	0.7128	0	103	61.5	138			
Toluene		0.75	0.036	0.7128	0	106	71.4	127			
Ethylbenzene		0.88	0.036	0.7128	0	124	70.9	132			
Xylenes, Total		2.4	0.071	2.138	0	110	76.2	123			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- Analyte detected in the associated Method Blank В
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

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26-May-17

Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Williams F Jic 150 #1								
Sample ID	1705C39-002AMS	SampTy	vpe: MS	TestC	Code: El	PA Method	8021B: Volat	tiles	
Client ID:	Jic 150 #1 Land Fai	r Batch	ID: B43026	Ru	inNo: 4	3026			
Prep Date:		Analysis Da	ate: 5/24/2017	Se	qNo: 1	354512	Units: mg/K	g	
Analyte		Result	PQL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit
Surr: 4-Brom	ofluorobenzene	<mark>1.</mark> 1	0.7128		148	66.6	132		
Sample ID	1705C39-002AMSD	SampTy	vpe: MSD	TestC	Code: El	PA Method	8021B: Volat	tiles	
Client ID:	Jic 150 #1 Land Fai	r Batch	ID: B43026	Ru	inNo: 4	3026			
Prep Date:	,	Analysis Da	ate: 5/24/2017	Se	qNo: 1	354513	Units: mg/K	g	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.73	0.018	0.7128	0	102	61.5	138	1.36	20		
Toluene	0.74	0.036	0.7128	0	104	71.4	127	1.50	20		
Ethylbenzene	0.88	0.036	0.7128	0	123	70.9	132	0.868	20		
Xylenes, Total	2.3	0.071	2.138	0	108	76.2	123	1.34	20		
Surr: 4-Bromofluorobenzene	1.1		0.7128		147	66.6	132	0	0	S	

- * Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- Holding times for preparation or analysis exceeded Η
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

WO#: 1705C39

> Qual S

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26-May-17

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albuc TEL: 505-345-3975 I Website: www.hall	4901 querqu FAX: 5	Hawkins N e, NM 8710 05-345-410		ple Log-In C	check List
Client Name: WILLIAMS FIELD SERVI	Work Order Number:	1705	C39		RcptNo	: 1
Received By: Anne Thorne 5/2	24/2017 7:15:00 AM			anne Ham	_	
Completed By: Andy Jansson 5/2	24/2017 8:41:41 AM			waar		
Reviewed By:	24117					
Chain of Custody						
1. Custody seals intact on sample bottles?		Yes		No 🗌	Not Present 🗹	
2. Is Chain of Custody complete?		Yes	\checkmark	No 🗌	Not Present	
3. How was the sample delivered?		Cour	ier			
Log In				_	_	
4. Was an attempt made to cool the samples?		Yes	\checkmark	No 🗌	NA	
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes	\checkmark	No 🗌	NA 🗌	
6. Sample(s) in proper container(s)?		Yes	\checkmark	No 🗆		
7. Sufficient sample volume for indicated test(s)?		Yes		No 🗌		
8. Are samples (except VOA and ONG) properly p	reserved?	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 🗹	# of preserved	-
12. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No 🗌	bottles checked for pH:	or >12 unless noted
13. Are matrices correctly identified on Chain of Cu	stody?	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		i di tala kan mana kanan			-
By Whom:	Via:	eMa	uil 🗌 Ph	one 🗌 Fax	In Person	
Regarding:			htere management			
Client Instructions:	a a dhalan muudan cha an ann ann an ann an ann ann ann ann				and a second	
17. Additional remarks:						
	ntact Seal No S	eal Da	ite S	Signed By		
1 1.3 Good Yes						

. . . .

0	hain	-of-Cu	ustody Record	Turn-Around	Time:				1C						TT	0			BIT	
Client:	WF.	S		□ Standard	Rush	5-25-17													NT	
Mailing Blo	Address	-ield	CR 4900 Nm 87413	Project Name	" 0#1 ho	5-25-17 Could Form			01 H	awki	www ns N	v.hal IE - 975	ienv Alb F	ironi iuqui Fax	ment erqu 505-	al.co e, N 345	om M 87 -410	7109		
			Morris @ Williams.com	Project Mana	cor			8	â			Î	nary		Req	ues				
	Package:		Level 4 (Full Validation)		morris		FMB's (8021)	TPH (Gas only)	RO / MRG			SIMS)		PO4,SO4	2 PCB's					
	AP	Othe	er	Sampler: Mo	Yes Kill	ふ~ □ No	+	+	RO / DI	418.1)	504.1)	8270	s	IO3,NO2	s / 8082		(AC			or N)
Date	Time	Matrix	Sample Request ID	Sample Tem Container Type and # Most Kt		HEAL NO. 1705C39	BTEX + MTBE	BTEX + MTBE	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or	RCRA 8 Metals	Anions (F,CI,NO ₃ ,NO ₂ ,PO ₄ ,SO ₄)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Chlande		Air Bubbles (Y or N)
5/23/17	2:00	soil	Jic 150 # 1 00 PA	1-402	Cool	-001	X		×									X		T
51/17	205	50i (Jic 150 # 1 (Do Law Form comp 91 Jic 150 # 1 N-2 (NORT)	1-422		_02	X		*									X		
Date:	Time:	Relinquish	v Killio	Received by:	lat-	Date Time 5/23/17 /735	Ren	narks	3:											
Date:	Time:	Relinquish	ed by:	Received by	ni X	Date Time. 05/24/17 07/5												2.00		

-

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

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 April 3, 2017

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

Release Notification and Corrective Action									
	OPERATOR	Initial Report	Final Repo						
Name of Company Williams Four Corners LLC	Contact Michael Hannan								
Address 1755 Arroyo Dr., Bloomfield, NM 87413	Telephone No. (505) 632-4807								
Facility Name Lateral S-67	Facility Type Pipeline								
Surface Owner Bureau of Land Management 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
М	26	29N	5W					Rio Arriba

Latitude 36.6914° N Longitude -107.3353° W NAD83

NATURE	OF RELEASE
Type of Release Natural Gas	Volume of Release 12,127 MCF Volume Recovered None
Source of Release Pipeline	Date and Hour of Occurrence Date and Hour of Discovery
	10/06/2017 9:02 AM 10/07/2017 4:00 PM
Was Immediate Notice Given?	
🛛 Yes 🗌 No 🗌 Not Required	If YES, To Whom? Vanessa Fields (OCD), Whitney Thomas (BLM) Date and Hour 10/09/17 10:05 AM (OCD) 10/09/17 2:11 PM (BLM) If YES, Volume Impacting the Waterourse.
By Whom? Michael Hannan	Data and Hour 10/00/17 10:05 AM (OCD)
By whom? Michael Hannan	10/00/17 2:11 PM (PLM)
	10/09/17 2.11 FM (BLM)
Was a Watercourse Reached?	If VES Volume Impacting the Way requires
Yes X No	IT TES, Volume impacting the way tool se.
	06,
If a Watercourse was Impacted, Describe Fully.*	
Describe Cause of Problem and Remedial Action Taken.*	
	rom third party reporting a release of natural gas on a Williams pipeline in area
	all personnel from the Twin Peaks Gathering District. Upon arrival from first
	ed for isolation. After the isolation was complete, further investigation was
performed to find that the pipeline damage was caused from a large bould	
boulder struck the pipeline, it appears that it contacted a pipeline seam, op	bening a large hole in the pipeline.
	. So in order to estimate the release volume, photographs were taken of the
	AutoCAD to estimate the area of the hole size (18.86 in2). The nearest well
	rating pressures during the release. A Williams Engineer III received all data
and estimated gas loss to be 12.127 MMCF. There was no evidence of the	e release of liquids from the pipeline.
	eline. It was decided to cut and install a riser with isolation valve downstream
	am well to be brought back online. This was executed on October 9th 2017.
There is a single well location upstream of the pipeline damage, this well	will remain shut in until it is decided on how to repair the pipeline.
Describe Area Affected and Cleanup Action Taken.*	
There ever a limit of a state of the limit o	
There were no liquids associated with this release. No cleanup actions need	cessary.
I harshy partify that the information given shows is true and complete to the	as heat of my heavily dee and up denotes d that support to NMOCD siles and
I nereby certify that the information given above is true and complete to the	he best of my knowledge and understand that pursuant to NMOCD rules and
	otifications and perform corrective actions for releases which may endanger
	NMOCD marked as "Final Report" does not relieve the operator of liability
	e contamination that pose a threat to ground water, surface water, human health
	bes not relieve the operator of responsibility for compliance with any other
federal, state, or local laws and/or regulations.	
Mu	OIL CONSERVATION DIVISION
Signature:	lan / 1-1
Printed Name: Michael Hannan	Approved by Environmental Specialist:
HUCS172963732	15

Title: Engineer, Sr.		Approval Date: 10 23 1-	۲ Expiration I	Date:
E-mail Address: michael.hannan@	Jwilliams.com	Conditions of Approval:		Attached
Date: 10/13/2017	Phone: (505) 632-4807	-	_	
Attach Additional Sheets If Ne	cessary			

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr.

es Form C-141 Revised April 3, 2017 OIL CONSTIT 1 Copy to appropriate District Office in DEC 05 2000 dance with 19.15.29 NMAC.

Santa Fe, NM 87505

Release Notification and Corrective Action

	OPERATOR	\boxtimes	Initial Report	\boxtimes	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 31-6 CDP	Facility Type Compressor Station				
ruonity runne or o obr	Tuenney Type compresser Station				

Surface Owner Bureau of Land Management 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° N Longitude -107.42001° W NAD83

NATURE OF RELEASE

Type of Release Natural Gas	Volume of Release 203.7 MCF	Volume Recovered None
Source of Release Glycol Recirculation Pump	Date and Hour of Occurrence	Date and Hour of Discovery
	11/25/2017 5:00 PM	11/25/2017 7:00 PM
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*	1	
Describe Cause of Problem and Remedial Action Taken.*		
Vibration broke a nipple on a dehy glycol recirculation pump, causing th	e release of an estimated 203 67 MCF	The dehydrator was blocked in so that
no further gas would enter the equipment and leak from the pump. The p		
no further gas would enter the equipment and leak nom the pump. The p	ump was replaced and the unit returne	
Describe Area Affected and Cleanup Action Taken.*		
r		
There were no liquids associated with this release. No cleanup actions new	cessary.	
	•	
I hereby certify that the information given above is true and complete to the		
regulations all operators are required to report and/or file certain release ne		
public health or the environment. The acceptance of a C-141 report by the		
should their operations have failed to adequately investigate and remediate		
or the environment. In addition, NMOCD acceptance of a C-141 report de	bes not relieve the operator of response	ibility for compliance with any other
federal, state, or local laws and/or regulations.	OUL CONCERN	
	<u>OIL CONSERV</u>	ATION DIVISION
Signature: Michael Hannan		$() \land)$
	Approved by Environmental Specialis	
Printed Name: Michael Hannan	Approved by Environmental Specialis	here
Title: Engineer, Sr.	Approval Date: Approval Date:	Expiration Date:
E-mail Address: michael.hannan@williams.com	Conditions of Approval:	Attached
Date: 11/28/2017 Phone: (505) 632-4807		
Attach Additional Sheets If Necessary		
Autach Auditional Sheets II Necessary	NVF1734042	103
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

OIL CONS. DIV DIST. 3 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 April 3, 2017

DEC 12 2017 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

API No.

Release Notification and Corrective Action

	OPERATOR	\boxtimes	Initial Report	\boxtimes	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 Sims Mesa	Facility Type Compressor Station				
L					

Surface Owner Bureau of Land Management Mineral Owner

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County		
A	22	30N	7W					Rio Arriba		

Latitude 36.805198° N Longitude -107.549568° W NAD83

Type of Release Natural Gas	Volume of Release 379.9 MCF	Volume Recovered None
Source of Release Pressure Relief Valve	Date and Hour of Occurrence	Date and Hour of Discovery
	11/20/2017 04:15 AM	11/20/2017 07:00 AM
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.*		
		U. I.I. J. A.I. DDV
A compressor pressure release valve (PRV) had a partial cooler freeze w		
was damaged and could not re-seal allowing gas to continue to escape. A		
compressor was blocked in and blown down, the PRV seat was replaced	, and the PRV was rebuilt and placed	back into service.
Describe Area Affected and Cleanup Action Taken.*		
Describe Area Arrected and Cleanup Action Taken.		
There were no liquids associated with this release. No cleanup actions ne	cessary.	
I hereby certify that the information given above is true and complete to the	he best of my knowledge and understa	and that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release n		
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report"	does not relieve the operator of liability
should their operations have failed to adequately investigate and remediat	e contamination that pose a threat to g	ground water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of response	sibility for compliance with any other
federal, state, or local laws and/or regulations.		
	OIL CONSERV	VATION DIVISION
Signature: Michael Hannan	C	
Signature: Muchael grannan		
	Approved by Environmental Speciali	st:
Printed Name: Michael Hannan		la c
Title Designer Co	Circle 1 Clarker	E-risting Dates
Title: Engineer, Sr.	Approval Date: 2122	Expiration Date:
E-mail Address: michael.hannan@williams.com	Conditions of Approval	
E-mail Address. michael.naiman@wimams.com	Conditions of Approval:	Attached
Date: 11/28/2017 Phone: (505) 632-4807		
Attach Additional Sheets If Necessary	11/12 120 02511	107
reach reactional bhoets if recessary	NV-115050-	101

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

OIL CONS. DIV DIST. 3

Form C-141 2018 Revised August 8, 2011 5 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 Corne	rs LLC	Contact: Kijun Hong		
Address: 1755 Arroyo Dr., Farmington, I	NM 87413	Telephone No.: (505) 632-4475		
Facility Name: Jicarilla B-10		Facility Type: Meter		
Surface Owner: Jicarilla Tribe	Mineral Own	ner	BLM Project No	

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
A	36	26N	4W			· · · · · · · · · · · · · · · · · · ·		Rio Arriba

Latitude 36.4473 Longitude -107.1967

Type of Release: Natural Gas	Volume of Release: 176.0 MCF	Volume Recovered: 0 MCF
Source of Release: Broken meter tube	Date and Hour of Occurrence:	Date and Hour of Discovery:
	12/11/2017 at 8:00 AM	12/11/2017 at 8:00 AM
Was Immediate Notice Given?	If YES, To Whom?	
Yes No Not Required	Vanessa Fields	
By Whom? Mitch Morris	Date and Hour: 12/12/2017@4:09P	M
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	ercourse.
🗌 Yes 🖾 No	NA	
If a Watercourse was Impacted, Describe Fully.*		
NA		
Describe Cause of Problem and Remedial Action Taken.*		
Meter tube failure due to freeze. Section was isolated and repaired.		
Describe Area Affected and Cleanup Action Taken.*		
No signs of liquids impact. Only gas release.		
I hereby certify that the information given above is true and complete to t	he best of my knowledge and understa	nd that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release n		
public health or the environment. The acceptance of a C-141 report by th		
should their operations have failed to adequately investigate and remediat		
or the environment. In addition, NMOCD acceptance of a C-141 report d	loes not relieve the operator of respons	ibility for compliance with any other
federal, state, or local laws and/or regulations.		the second s
1112	OIL CONSERV	ATION DIVISION
L'à AD	5	
Signature:	Approved by Environmental Specialis	t:
Printed Name: Kijun Hong		
		<u> </u>
Title: Environmental Specialist	Approval Date:	Expiration Date:
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	Attached
	-	
Date: 12/28/2017 Phone: (505) 632-4475		
Attach Additional Sheets If Necessary	NIFLANDRZ	ULTH

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 8, 2011

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

Release Notification and Corrective Action OPERATOR Initial Report **Final Report** Name of Company: Williams Four Corners LLC Contact: Kijun Hong Address: 1755 Arroyo Dr., Farmington, NM 87413 Telephone No.: (505) 632-4475 Facility Name: SJ 29-5 #4 Facility Type: Meter Surface Owner: BLM Mineral Owner BLM Project No. LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County 29N 5W **Rio Arriba** L 6 Latitude 36.75207 Longitude -107.40458 NATURE OF RELEASE Type of Release: Natural Gas and Condensate Volume of Release: 111.6 MCF Volume Recovered: 0 MCF 40 gal Condensate 0 gal Source of Release: Broken meter tube Date and Hour of Occurrence: Date and Hour of Discovery: 12/11/2017 at 2:00 PM 12/11/2017 at 2:00 PM Was Immediate Notice Given? If YES, To Whom? Yes No Not Required **Cory Smith** By Whom? Kijun Hong Date and Hour: 12/11/2017 @ 6:31PM Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. 🗌 Yes 🛛 No NA OIL CONS. DIV DIST. 3 If a Watercourse was Impacted, Describe Fully.* NA Describe Cause of Problem and Remedial Action Taken.* Meter tube failure due to freeze. Section was isolated and repaired. Describe Area Affected and Cleanup Action Taken.* 35ftx50ft area impacted by spray. Cleanup in progress. 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. OIL CONSERVATION DIVISION Approved by Environmental Specialist Signature: Printed Name: Kijun Hong Expiration Date: Approval Date: **Title: Environmental Specialist** Conditions of Approval: SAmple E-mail Address: kijun.hong@williams.com Attached 🕅 505) 632-4475 For TRIL, Bick, Benzene # NXS 180165 2190 Phone: (505) 632-4475 Date: 12/28/2017 * Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on $\frac{1/2}{14}$ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number $\frac{165290}{165290}$ 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 <u>division-approved corrective action</u> 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 N/A. 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; C₆ thru C₃₆), 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; C₆ thru C₃₆), 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

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	\boxtimes	Initial Report	\bowtie	Final Report
Name of Company: Williams Four Corners LLC	Contact: Kijun Hong				
Address: 1755 Arroyo Dr., Farmington, NM 87413	Telephone No.: (505) 632-4475				
Facility Name: Jicarilla 117E-2B	Facility Type: Meter				

Surface Owner: Jicarilla Tribe

Mineral Owner

BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
B	33	26N	3W					Rio Arriba

Latitude 36.448582 Longitude -107.146706

Type of Release: Natural Gas	Volume of Release: 86.2 MCF	Volume Recovered: 0 MCF
Source of Release: Broken meter tube, due to freeze	Date and Hour of Occurrence:	Date and Hour of Discovery:
	1/24/2018 at 12:15 PM	1/24/2018 at 12:15 PM
		Gas loss calculated on 2/6/2018
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🔲 No 🖾 Not Required	NA	
By Whom? NA	Date and Hour: NA	
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	tercourse.
🗌 Yes 🖾 No	NA	
If a Watercourse was Impacted, Describe Fully.*	•	
NA		
Describe Cause of Problem and Remedial Action Taken.*		
Meter tube failure due to freeze. Section was isolated and repaired.		
Describe Area Affected and Cleanup Action Taken.*		
No signs of liquids impact. Only gas release.		
to signo of induito impact. Only gas receiped		
I hereby certify that the information given above is true and complete to the		
regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the		
should their operations have failed to adequately investigate and remediate		
or the environment. In addition, NMOCD acceptance of a C-141 report de		
federal, state, or local laws and/or regulations.		
11 12	OIL CONSERV	ATION DIVISION
L. A.		
Signature:	Approved by Environmental Specialis	st:
		φ
Printed Name: Kijun Hong	- Can	r.s
	2122 1220	
Title: Environmental Specialist	Approval Date: 2 28 2018	Expiration Date:
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	
		Attached
Date: 2/13/2018 Phone: (505) 632-4475	Cloater Submit	Heal
Attach Additional Sheets If Necessary	dieis danch	online
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State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

	OPERATOR	Initial Report	\boxtimes	Final Report
Name of Company: Williams Four Corners LLC	Contact: Kijun Hong			
Address: 1755 Arroyo Dr., Farmington, NM 87413	Telephone No.: (505) 632-4475			
Facility Name: SJ 29-5 #4	Facility Type: Meter			

Surface Owner: BLM	Mineral Owner	BLM Project No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County	
L	6	29N	5W					Rio Arriba	

Latitude 36.75207 Longitude -107.40458

Type of Release: Natural Gas and Condensate	Volume of Release: 111.6 MCF	Volume Recovered: 0 MCF
	40 gal Condensate	0 gal
Source of Release: Broken meter tube	Date and Hour of Occurrence:	Date and Hour of Discovery:
	12/11/2017 at 2:00 PM	12/11/2017 at 2:00 PM
Was Immediate Notice Given?	If YES, To Whom?	
🛛 Yes 🗌 No 🗌 Not Required	Cory Smith	
By Whom? Kijun Hong	Date and Hour: 12/11/2017 @ 6:31	IPM
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.
🗌 Yes 🖾 No	NA	
If a Watercourse was Impacted, Describe Fully.* NA		
Describe Cause of Problem and Remedial Action Taken.* Meter tube failure due to freeze. Section was isolated and repaired.		
Describe Area Affected and Cleanup Action Taken.* 30ftx10ft area impacted by spray. All surface impacts have been rem and sampling form for further detail.	noved and replaced with clean dirt	. Please see confirmation sample report
I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release no public health or the environment. The acceptance of a C-141 report by the should their operations have failed to adequately investigate and remediate or the environment. In addition, NMOCD acceptance of a C-141 report do federal, state, or local laws and/or regulations.	otifications and perform corrective ac NMOCD marked as "Final Report" e contamination that pose a threat to g	tions for releases which may endanger does not relieve the operator of liability ground water, surface water, human health
2,00	OIL CONSERV	VATION DIVISIÓN
TO TOU	Approved by Environmental Speciali	st:
Signature:		Marce T
Printed Name: Kijun Hong		
Printed Name: Kijun Hong		
Title: Environmental Specialist	Approval Date: 2/27/16	Expiration Date:
E-mail Address: kijun.hong@williams.com	Conditions of Approval:	Attached
Date: 2/13/2018 Phone: (505) 632-4475		
		and a
Attach Additional Sheets If Necessary)	my DISL. J
This lovies of	- CONS	DIVE
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AV8
	OILCOL	011104
	OIL	2010
	OIL CO	20 10 10x
	OILCO	2 0 - 20 mg
	OIL CO	DIV DIST. 3 202018

	Remea	liation Excavation an	d Sampling Form	
Site Name	5.J. 29	3-5 4		
Excavation Di	mensions (feet)			
3	گ Length	10	Width	Depth
Excavation Dia	agram and Sam			
		x		
-	*	meter		
•		×	3	
Exem	1971on Al	ien	x SAmple	points
Sample Inform	ation			
OCD Witness Sa Agency(s) Repr		Cory w/ c	DED gave ve.	bel ok to sample
Sample ID	Sample Date	Type (Composite, Grab)	Location (Floor, Sidewall)	Comments
	20mp. 1-10-18		Floor	
		•		

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

January 24, 2018

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

RE: SJ2954

OrderNo.: 1801693

Dear Kijun Hong:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/12/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical	Report
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Lab Order 1801693

Date Reported: 1/24/2018

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Williams Field Services Project: S J 29 5 4

1801693-001

Lab ID:

Client Sample ID: SJ 29-5-4-COMP Collection Date: 1/10/2018 12:00:00 PM Received Date: 1/12/2018 8:05:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	CJS
Chloride	ND	30	mg/Kg	20	1/22/2018 7:40:03 PM	36137
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst	TOM
Diesel Range Organics (DRO)	11	9.4	mg/Kg	1	1/16/2018 10:49:06 PM	36031
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/16/2018 10:49:06 PM	36031
Surr: DNOP	102	70-130	%Rec	1	1/16/2018 10:49:06 PM	36031
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst:	NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Surr: BFB	106	15-316	%Rec	1	1/16/2018 10:17:55 PM	36020
EPA METHOD 8021B: VOLATILES					Analyst:	NSB
Methyl tert-butyl ether (MTBE)	ND	0.098	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Benzene	ND	0.024	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Toluene	ND	0.049	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Ethylbenzene	ND	0.049	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Xylenes, Total	ND	0.098	mg/Kg	1	1/16/2018 10:17:55 PM	36020
Surr: 4-Bromofluorobenzene	91.6	80-120	%Rec	1	1/16/2018 10:17:55 PM	36020

Matrix: SOIL

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank		
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range		
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 5		
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range		
	PQL	Practical Quanitative Limit	RL	Reporting Detection Limit		
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified		

Hall Environmental Analysis Laboratory, Inc.

Client: Williams Field Services **Project:** SJ 2954

Sample ID MB-36137	SampType: mblk	SampType: mblk TestCode: EPA Method 300.0: Anions									
Client ID: PBS	Batch ID: 36137										
Prep Date: 1/22/2018	Analysis Date: 1/22/2018	SeqNo: 1564123	Units: mg/Kg								
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual							
Chloride	ND 1.5										
Sample ID LCS-36137	SampType: Ics	TestCode: EPA Method	300.0: Anions								
Sample ID LCS-36137 Client ID: LCSS	SampType: Ics Batch ID: 36137	TestCode: EPA Method RunNo: 48603	300.0: Anions								
	1 71		300.0: Anions Units: mg/Kg								
Client ID: LCSS	Batch ID: 36137 Analysis Date: 1/22/2018	RunNo: 48603		RPDLimit Qual							

Qualifiers:

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

WO#:

Page 2 of 5

1801693 24-Jan-18

Hall Environmental Analysis Laboratory, Inc.

Client: Williams Field Services Project: S J 29 5 4

Sample ID LCS-36031	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 36031	RunNo: 48463	unNo: 48463						
Prep Date: 1/15/2018	Analysis Date: 1/16/2018	SeqNo: 1559069	Units: mg/Kg						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual						
Diesel Range Organics (DRO)	43 10 50.00	0 85.7 70	130						
Surr: DNOP	4.6 5.000	92.2 70	130						
Sample ID MB-36031	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 36031	RunNo: 48463							
Prep Date: 1/15/2018	Units: mg/Kg								
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual						
Diesel Range Organics (DRO)	ND 10								
Notor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	10 10.00	101 70	130						
Sample ID MB-36084	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 36084	RunNo: 48529							
Prep Date: 1/17/2018	Analysis Date: 1/18/2018	SeqNo: 1560963	Units: %Rec						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual						
Surr: DNOP	10 10.00	105 70	130						
Sample ID LCS-36084	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 36084	RunNo: 48529							
Prep Date: 1/17/2018	Analysis Date: 1/18/2018	SeqNo: 1561380	Units: %Rec						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual						
Surr: DNOP	5.0 5.000	101 70	130						

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

Client: Williams Field Services **Project:** SJ 2954

5								
Sample ID MB-36020	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 36020	RunNo: 48490						
Prep Date: 1/15/2018	Analysis Date: 1/16/2018	SeqNo: 1558517 Units: mg/Kg						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua						
Gasoline Range Organics (GRO)	ND 5.0	μ.						
Surr: BFB	910 1000	90.8 15 316						
Sample ID LCS-36020 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 36020	RunNo: 48490						
Prep Date: 1/15/2018	Analysis Date: 1/16/2018	SeqNo: 1558518 Units: mg/Kg						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua						
Gasoline Range Organics (GRO)	24 5.0 25.00	0 96.3 75.9 131						
Surr: BFB	1000 1000	101 15 316						
Sample ID MB-36033	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 36033	RunNo: 48490						
Prep Date: 1/15/2018	Analysis Date: 1/16/2018	SeqNo: 1558542 Units: %Rec						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua						
Surr: BFB	870 1000	86.8 15 316						
Sample ID LCS-36033	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 36033	RunNo: 48490						
Prep Date: 1/15/2018	Analysis Date: 1/16/2018	SeqNo: 1558543 Units: %Rec						
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qua						
Surr: BFB	940 1000	94.2 15 316						

Qualifiers:

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

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Hall Environmental Analysis Laboratory, Inc.

Client: Williams Field Services

Project: S J 29 5 4

Sample ID MB-36020	SampType: MI	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles						
Client ID: PBS	Batch ID: 36	020	F	RunNo: 48	3490								
Prep Date: 1/15/2018	Analysis Date: 1	16/2018	S	SeqNo: 15	558554	Units: mg/Kg							
Analyte	Result PQL SPK value SPK Ref Val %REC				LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Methyl tert-butyl ether (MTBE)	ND 0.10												
Benzene	ND 0.025												
Toluene	ND 0.050												
Ethylbenzene	ND 0.050												
Xylenes, Total	ND 0.10												
Surr: 4-Bromofluorobenzene	r: 4-Bromofluorobenzene 1.0 1.000 100 80												
Sample ID LCS-36020 SampType: LCS TestCode: EPA Method 8021B: Volatiles													
Client ID: LCSS	Batch ID: 36	020	F	RunNo: 48	3490								
Prep Date: 1/15/2018	Analysis Date: 1/	16/2018	2018 SeqNo: 1558555 Units: mg/Kg				g						
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Methyl tert-butyl ether (MTBE)	0.93 0.10	1.000	0	92.9	70.1	121							
Benzene	1.0 0.025	1.000	0	102	77.3	128							
Toluene	1.0 0.050	1.000	0	101	79.2	125							
Ethylbenzene	0.99 0.050	1.000	0	99.2	80.7	127							
Xylenes, Total	3.0 0.10	3.000	0	101	81.6	129							
Surr: 4-Bromofluorobenzene	1.0	1.000		102	80	120							
Sample ID MB-36033	SampType: MI	BLK	Tes	tCode: EP	A Method	8021B: Volat	iles						
Client ID: PBS	Batch ID: 36	033	F	RunNo: 48	3490								
Prep Date: 1/15/2018	Analysis Date: 1	16/2018	S	SeqNo: 15	558579	Units: %Rec	;						
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: 4-Bromofluorobenzene	0.96	1.000		96.4	80	120							
Sample ID LCS-36033	SampType: LC	s	Tes	tCode: EP	PA Method	8021B: Volat	iles						
Client ID: LCSS	Batch ID: 36	033	F	RunNo: 48	3490								
Prep Date: 1/15/2018	Analysis Date: 1	16/2018	S	SeqNo: 15	558580	Units: %Rec							
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Surr: 4-Bromofluorobenzene	0.98	1.000		97.8	80	120							

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
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- 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 FIELD SERVI	Work Order Number:	Work Order Number: 1801693				RcptNo: 1								
Received By: Isaiah Ortiz Completed By: Sophia Campuzano Reviewed By: DDS	1/12/2018 8:05:00 AM 1/12/2018 11:44:05 AN しんてんち	И		I G	ing.	-								
Chain of Custody 1. Is Chain of Custody complete? 2. How was the sample delivered?		Yes <u>Cou</u>		No		Not Present								
Log In 3. Was an attempt made to cool the samples?		Yes		No										
4. Were all samples received at a temperature of	of >0° C to 6.0°C	Yes		No		NA 🗌								
5. Sample(s) in proper container(s)?		Yes	V	No										
6. Sufficient sample volume for indicated test(s)	?	Yes		No										
7. Are samples (except VOA and ONG) properly	preserved?	Yes		No										
8. Was preservative added to bottles?		Yes		No		NA 🗆								
9. VOA vials have zero headspace?		Yes		No		No VOA Vials								
10. Were any sample containers received broker	1?	Yes		No										
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)				No		# of preserved bottles checked for pH: (<2 or >12 u	nless noted)							
12. Are matrices correctly identified on Chain of C	Custody?	Yes	\checkmark	No		Adjusted?	:							
13. Is it clear what analyses were requested?			\checkmark	No	Ξ.		1							
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes	\checkmark	No		Checked by:								
Special Handling (if applicable)														
15. Was client notified of all discrepancies with t	his order?	Yes		No		NA 🗹								
Person Notified: By Whom: Regarding: Client Instructions:	Date: Via:] eM	ail 🗌 Ph	one 🗌] Fax	In Person								
16. Additional remarks:														
17. Cooler Information		Seal D	ate S	Signed	Ву									

Chain-of-Custody Record Turn-Around Time: ent: Williams Fizzo Serwice Standard Rush Project Name: ST. 29-5 #4						AN	IAL	YS	515	S L	AB	0						
omfi	ero.	O NEW MEXICO Project #:							4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Analysis Request									
r Fax#: / Package:			Kyin	Hong		's (8021)	(Gas only)	RO / MRO)					PCB's					
04.0%	Othe	èr	Sampler: /	M. Stake		+ TMB	+ TPH	18 1) 18 1)	04.1)	8270		03.NO2	s / 8082		(A)			or N)
(Type) Time	Matrix	Sample Request ID	Sample Tem Container Type and #		HEAL No.	3TEX + MTBE	3TEX + MTBE	[PH 8015B (GI	EDB (Method 5	AH's (8310 or	RCRA 8 Metals	Anions (F,CI,N(3081 Pesticide:	3260B (VOA)	3270 (Semi-VO	CALORIDA		Air Bubbles (Y or N)
(2:00	sail	5529-5-4-10mp	402	1ce	-001	+	-	Concession in which the real of the local division in which the local division is not the local division in the				-				+		
Time: 14202 Time: 1851	Relinquish	iste Walt	Received by:		a 18 0805					1				1	1			
	Address Address Fiss-C r Fax#: I Package: dard tation AP (Type) Time (L)00 Time (S)1	Address: 175 Address: 10000 AP 0000 Time: Matrix Image: Address Application Address Image: Address Im	Williams Fizzd Setwice Address: 1755 Arrow 4 D.R. amFizzo NEW MEXICO #:55-632-4475 37473 r Fax#: Lijum - hang Q williams . com Package: dard Level 4 (Full Validation) tation AP (Type) Time Matrix Sample Request ID (200 SAI 55 29-5-4-COMP I	Williams Fizzb Situric Istandard Address: 1755 ARROYADR SJT. Address: 1755 ARROYADR SJT. 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Bthu AP Other	Millingense Gizzo Scitture Astandard Rush Project Name: SJ: 25-5 ± 4 Address: 1755 ARROYA D.R. SJ: 25-5 ± 4 Dam Fiezo New MEX/co Project Name: SJ: 25-5 ± 4 Dam Fiezo New MEX/co Project #: UWD 17437336 Frank: Level 4 (Full Validation) Project Manager: Package: Level 4 (Full Validation) Sampler: M. Backle On loc: Eres No (Type) Sample Request ID Sample Temperature: 1,2-0.9 (CF) D3 Time Matrix Sample Request ID Container Time Matrix Sample Request ID Project Manager: IWD Soil SJ 29-5-4-0000 402 ICC -001 IWD Soil SJ 29-5-4-0000 402 ICC -001 IWD Soil SJ 29-5-4-0000 402 ICC -001 IWD Soil SJ 29-5-4-0000 ICC ICC ICC ICC IWD Soil SJ 29-5-4-0000 ICC ICC ICC ICC ICC IWD Soil ICC ICC <td>Image: Construction of the constru</td> <td>Imame of construct y freecord Image: Instruct of the standard o</td> <td>Andress: 1755 ARROY A D.R. Project Name: SJ. 25-5 #4 Address: 1755 ARROY A D.R. SJ. 25-5 #4 4901 Haw Address: 1755 ARROY A D.R. 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Project Name: ST 25-5 #4 Project Name: Www.hallenviroumental.com Address: TSS ARROYA D.K. Project Manager: Www.hallenviroumental.com Analysis Request Constrainer Project Manager: Www.hallenviroumental.com Analysis Request If wig go of ad 2009 Www.hallenviroume.com Constrainer Project Manager: Www.hallenviroumental.com Biologo of the Wig go of ad 2009 Www.hallenviroume.com Container Project Manager: Wig go of ad 2009 Wig go of ad 2009	Andress: Fizzb Schultz Atdress: Atdress: Standard Rush Project Name: SJ: 25-5 #4 Project Name: SJ: 25-5 #4 Www.hallenvironmental.com Address: 1755 ARRow A.D.R. SJ: 25-5 #4 Project Manager: SJ: 25-5 #4 Www.hallenvironmental.com Address: 1755 ARRow A.D.R. SJ: 25-5 #4 Project Manager: SJ: 25-5 #4 Www.hallenvironmental.com Address: 1755 ARRow A.D.R. 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