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: pCS1507831688

### 3RP - 1024

### ELM RIDGE EXPLORATION COMPANY LLC

10/20/2017

State of New Mexico Energy Minerals and Natural Resources

t

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.

			D		And the Party of t	C, INIVI 075							
			Rele	ease Notifie	catio		orrective A	ction					
						<b>OPERA</b>				l Report	$\boxtimes$	Final Repor	
				kna DJR opera	ting		anna Hamilton	330-2736	)				
Address: #2			I, NM 874	413			No. 634-1144						
Facility Nat	me: AXI Aj	pache H12				Facility Typ	e: pipeline						
Surface Ow	mer: Jicaril	la		Mineral C	Owner:				API No.	n/a			
				LOCA	ATIO	ON OF RELEASE							
Unit Letter	Section 9	Township 23N	Range 5W	Feet from the	North	h/South Line	Feet from the	East/W			Coun	ty	
				Latitude: 3	6.245	1_Longitude	e: -107.37634	OIL	CONS.	DIV DIS	T 3		
				NAT	TURE	OF REL	EASE		OCT O				
		nd oil mixtur					Release: unknow		Volume R	Ecovered: r	n/a		
Source of Re	lease: unkno	own at this tin	ne, suspec	ted corrosion in p	oipeline	Date and H	Iour of Occurrence	ce	9.5.17 afte	ernoon			
Was Immedi	ate Notice G	liven?				If YES, To	Whom?						
			Yes	No 🗌 Not R	equired								
By Whom? I	Dianna Hami	ilton					lour 9.5.17 3:48p						
Was a Water	course Reac		N.	L N I		If YES, Vo	olume Impacting	the Water	course.				
			Yes										
and clean up						*	sh, water table wa						
line locate, e Once one cal source of rele	mployee was 1 was release ease was fou	s using gas sn ed, excavation nd, soil samp	n began wi ling was c	tion device which here it was discovered onducted, all lab	h repor vered th s came	t high concent at soil was sat back well belo	rations of gas, em urated with hydro ow standards. App	ployee ha ocarbon oc oroval from	d wells sh lor. Jicaril n the tribe	ut in and pl la tribe was	aced a notifie	one call. ed, once	
Describe Are backfill soil	ea Affected a was taken fro	and Cleanup A om the J6 bor	Action Tak row pit pe	en.* See diagra	am for s st. 5pt.	sampling detai composite soil	backfill was comp ls. Area was exca l samples were tal	vated, cor	ntaminated				
I hereby cert regulations a public health should their or the enviro	ify that the in ll operators a or the envir operations ha nment. In ac	nformation gi are required to onment. The ave failed to a	iven above o report ar acceptanc adequately OCD accep	is true and comp ad/or file certain to be of a C-141 repo- investigate and to	olete to release ort by th remedia	the best of my notifications as ne NMOCD m te contamination	knowledge and u nd perform correc arked as "Final R on that pose a thr e the operator of	ctive actio eport" do reat to gro	ns for rele es not relie und water,	ases which eve the ope surface wa	may en rator of ater, hu	ndanger f liability man health	
Signature:	0.	na Al	1	Iton		OIL CONSERVATION DIVISION						4	
Printed Nam						Approved by	Environmental S	pecialist:	Con	LJ	-	$\gg$	
Title: HSE C	oordinator					Approval Dat	te: 10/20/17	Ez	piration D	pate:	C		
E-mail Addr	ess: dhamilto	on@djrllc.cor	n			Conditions of	f Approval:		0	Attached			
Date: Septen	ber 26, 201	7 Phone: 505	5-330-2730	5		_	-			-	_		
* Attach Addi					$r \leq 1$	72934	MALLE			1	×.		
				TN	21	101124	0040						

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**

	<b>OPERATOR</b>	Initial Report	Final Report
Name of Company: Elm Ridge Exploration kna DJR operating	Contact: Dianna Hamilton 330-2736		
Address: #20 CR 5060 Bloomfield, NM 87413	Telephone No. 634-1144	-	
Facility Name: AXI Apache H12	Facility Type: pipeline		

Surface Owner: Jicarilla

API No. n/a

#### LOCATION OF RELEASE

Mineral Owner:

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	9	23N	5W					

#### Latitude: 36.24511 Longitude: -107.37634

#### NATURE OF RELEASE

Type of Release: Water and oil mixture	Volume of Release: unknown	Volume Re	ecovered: n/a
Source of Release: unknown at this time, suspected corrosion in pipeline	Date and Hour of Occurrence	9.5.17	
Was Immediate Notice Given?	If YES, To Whom?		
X Yes No Not Required	Cory Smith		
By Whom? Dianna Hamilton	Date and Hour 9.5.17 3:48pm		
Was a Watercourse Reached? Xes I No	If YES, Volume Impacting the Wa	itercourse.	
If a Watercourse was Impacted, Describe Fully.* Release is just off the ba	ank of the wash, full extent of excavat	tion is still yet	to be determined.
Describe Cause of Problem and Remedial Action Taken.* Source of relea was using gas sniffer detection device which report high concentrations of	se has not been discovered yet, Durir	ng a routine sta	andard line locate, employee
released, excavation began where it was discovered that soil was saturated			
found, soil sampling and clean up will begin.	i with hydrocarbon odor. sicarina tric	c was notified	i, once source of release is
Describe Area Affected and Cleanup Action Taken.* TBD			
I hereby certify that the information given above is true and complete to the	he best of my knowledge and underst	and that pursu	ant to NMOCD rules and
regulations all operators are required to report and/or file certain release n	otifications and perform corrective ad	ctions for relea	ases which may endanger
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report"	does not relie	eve the operator of liability
should their operations have failed to adequately investigate and remediat			
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respon	sibility for co	mpliance with any other
federal, state, or local laws and/or regulations.			
Signature: Mianna Hamilton	OIL CONSER	VATION I	DIVISION
	Approved by Environmental Speciali	st:	
Printed Name: Dianna Hamilton			
Title: HSE Coordinator	Approval Date:	Expiration D	Date:
E-mail Address: dhamilton@djrllc.com	Conditions of Approval:		
			Attached
Date: September 6, 2017 Phone: 505-330-2736			

\* Attach Additional Sheets If Necessary

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 Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-138 Revised August 1, 2011

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

#### **REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. Generator Name and Address:
DJR Operating, LLC
2. Originating Site:
AXI Apache H12
3. Location of Material (Street Address, City, State or ULSTR): N. 36.24511 W107.37624S9 T23N R5W
4. Source and Description of Waste: Water oil mixture from pipeline release.
Estimated Volume $50$ yd <sup>3</sup> / bbls Known Volume (to be entered by the operator at the end of the haul) yd <sup>3</sup> / bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Dianna R. Hamilton , representative or authorized agent for DJR Operating do hereby
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt:       Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste.         Operator Use Only:       Waste Acceptance Frequency       Monthly       Weekly       Per Load
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I
5. Transporter: NRE
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: JFJ Landfarm / Industrial Ecosystems, INC
Address of Facility: #49 CR 3150 Aztec, NM 87410
Method of Treatment and/or Disposal:
Evaporation Injection Treating Plant Z Landfarm Landfill Other
Waste Acceptance Status:
APPROVED       DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: TITLE: DATE:
SIGNATURE: TELEPHONE NO.:
Surface Waste Management Facility Authorized Agent

Jic. AXI H-12 Sampling Date Y . Z C e -Page



75 Suttle Street Durango, CO 81303 970.247.4220 Phone 970.247.4227 Fax www.greenanalytical.com

21 September 2017

Dianna Hamilton DJR Operating #20 CR 5060 Bloomfield, NM 87413 RE: TPH Ext.

Enclosed are the results of analyses for samples received by the laboratory on 09/11/17 15:40. If you need any further assistance, please feel free to contact me.

Sincerely,

Dellie Zufett

Debbie Zufelt Reports Manager

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <a href="http://greenanalytical.com/certifications/">http://greenanalytical.com/certifications/</a>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water through the Colorado Department of Public Health and Environment and EPA region 8.



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DJR Operating	Project: TPH Ext.	
#20 CR 5060	Project Name / Number: AXI Apache H-12	Reported:
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/21/17 17:07

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N. Wall SC1	1709083-01	Solid	09/11/17 13:00	09/11/17 15:40
N. Wall SC2	1709083-02	Solid	09/11/17 13:00	09/11/17 15:40
S. Wall SC1	1709083-03	Solid	09/11/17 13:00	09/11/17 15:40
S. Wall SC2	1709083-04	Solid	09/11/17 13:00	09/11/17 15:40
E. Wall SC1	1709083-05	Solid	09/11/17 13:00	09/11/17 15:40
E. Wall SC2	1709083-06	Solid	09/11/17 13:00	09/11/17 15:40
W. Wall SC1	1709083-07	Solid	09/11/17 13:00	09/11/17 15:40
W. Wall SC2	1709083-08	Solid	09/11/17 13:00	09/11/17 15:40
Base SC1	1709083-09	Solid	09/11/17 13:00	09/11/17 15:40
Base SC2	1709083-10	Solid	09/11/17 13:00	09/11/17 15:40

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ellie Zufett

Debbie Zufelt, Reports Manager

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Page 2 of 16



							www.Gr	eenAnalytica	l.com
DJR Operating		F	Project: TPH	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12				Reported:	
Bloomfield NM, 87413		Project Ma	anager: Dia	nna Hamilton				09/21/17	17:07
		I	N. Wall S	C1					
		170	9083-01 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Volatile Organic Compounds by EPA Me	thod 8021								
Volatile Organic Compounds by EPA Me Benzene*	thod 8021 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Benzene*		0.050 0.050	0.002	mg/kg	50	09/19/17	8021B		MS
	< 0.050			mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
Benzene* Foluene* Ethylbenzene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Benzene* Foluene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150 0.300	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17	8021B 8021B 8021B		MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 99.7 %	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes*	<0.050 <0.050 <0.050 <0.150 <0.300 <10.0	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 99.7 % 3.53	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B 8021B		MS MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10 DRO >C10-C28	<0.050 <0.050 <0.150 <0.300 <10.0 <10.0	0.050 0.050 0.150 0.300 10.0 10.0	0.002 0.004 0.010 0.018 99.7 % 3.53 2.04 2.04	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50 1 1	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS MS

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Debbie Zufelt, Reports Manager

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Page 3 of 16



		ų.					www.Gr	eenAnalytica	l.com
DJR Operating		I	Project: TPI	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12				Report	ed:
Bloomfield NM, 87413	Project Manager: Dianna Hamilton							09/21/17	17:07
		1	N. Wall S	C2					
		17	09083-02 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
olatile Organic Compounds by EPA M	lethod 8021								
/olatile Organic Compounds by EPA M Benzene*	<b>Aethod 8021</b> <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
		0.050 0.050	0.002 0.002	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
senzene*	< 0.050								
Senzene* 'oluene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Genzene* 'oluene* Cthylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
Genzene* Foluene* Cthylbenzene* Fotal Xylenes*	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17	8021B 8021B 8021B		MS MS
Senzene* 'oluene* Cthylbenzene* 'otal Xylenes* 'otal BTEX urrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
Genzene* 'oluene* Cthylbenzene* 'otal Xylenes* 'otal BTEX	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
Genzene* 'oluene* Cthylbenzene* 'otal Xylenes* 'otal BTEX urrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 101 %	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
Genzene* 'oluene* Cthylbenzene* 'otal Xylenes* 'otal BTEX wrrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 101 % 3.53	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B		MS MS MS MS MS
Senzene* Soluene* Schylbenzene* Sotal Xylenes* Sotal BTEX urrogate: 4-Bromofluorobenzene (PID) Setroleum Hydrocarbons by GC FID GRO C6-C10 ORO >C10-C28	<0.050 <0.050 <0.050 <0.150 <0.300 <10.0	0.050 0.050 0.150 0.300 10.0	0.002 0.004 0.010 0.018 101 % 3.53 2.04 2.04	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS MS

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Sellie Zufett

Debbie Zufelt, Reports Manager

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Page 4 of 16



Laboratories							www.Gr	eenAnalytica	al.com
DJR Operating			Project: TP	H Ext.					
#20 CR 5060	Proj	ect Name / 1	Number: A)	KI Apache H-12	2			Report	ed:
Bloomfield NM, 87413		Project N	Aanager: Dia	anna Hamilton				09/21/17	17:07
			S. Wall S	SC1					
		17	709083-03 (	(Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Benzene*	<0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Volatile Organic Compounds by EPA	Method 8021								
Benzene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Foluene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Ethylbenzene*	< 0.050	0.050	0.004	mg/kg	50	09/19/17	8021B		MS
fotal Xylenes*	< 0.150	0.150	0.010	mg/kg	50	09/19/17	8021B		MS
Total BTEX	< 0.300	0.300	0.018	mg/kg	50	09/19/17	8021B		MS
urrogate: 4-Bromofluorobenzene (PID)			101 %	72-148		09/19/17	8021B		MS
Petroleum Hydrocarbons by GC FID									
GRO C6-C10	<10.0	10.0	3.53	mg/kg	1	09/15/17	8015B		MS
DRO >C10-C28	<10.0	10.0	2.04	mg/kg	1	09/15/17	8015B		MS
CXT DRO >C28-C36	<10.0	10.0	2.04	mg/kg	1	09/15/17	8015B		MS
urrogate: 1-Chlorooctane			96.5 %	28.3-164		09/15/17	8015B		MS
Surrogate: 1-Chlorooctadecane			101 %	34.7-157		09/15/17	8015B		MS

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reblie Zufett

Debbie Zufelt, Reports Manager

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Page 5 of 16



Laboratories									www.GreenAnalytical.com			
DJR Operating		1	Project: TP	H Ext.								
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12	:		Reported:					
Bloomfield NM, 87413		Project M	anager: Dia	nna Hamilton				09/21/17	17:07			
			S. Wall S	C2								
		17	09083-04 (	Solid)								
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst			
<u>'olatile Organic Compounds by EPA N</u> enzene*	<b>1ethod 8021</b> <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS			
olatile Organic Compounds by EPA M	Iethod 8021											
oluene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS			
thylbenzene*	< 0.050	0.050	0.004	mg/kg	50	09/19/17	8021B		MS			
otal Xylenes*	< 0.150	0.150	0.010	mg/kg	50	09/19/17	8021B		MS			
otal BTEX	< 0.300	0.300	0.018		50	00/10/17						
		0.000	0.018	mg/kg	50	09/19/17	8021B		MS			
urrogate: 4-Bromofluorobenzene (PID)		0.000	102 %	72-148	50	09/19/17	8021B 8021B					
		0.200			50				MS			
etroleum Hydrocarbons by GC FID	<10.0	10.0			1				MS			
etroleum Hydrocarbons by GC FID RO C6-C10	<10.0 <10.0		102 %	72-148		09/19/17	8021B		MS MS			
etroleum Hydrocarbons by GC FID RO C6-C10 RO >C10-C28		10.0	<i>102 %</i> 3.53	72-148 mg/kg	1	<i>09/19/17</i> 09/15/17	8021B 8015B		MS MS MS			
urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID RO C6-C10 RO >C10-C28 XT DRO >C28-C36 urrogate: 1-Chlorooctane	<10.0	10.0 10.0	102 % 3.53 2.04 2.04	72-148 mg/kg mg/kg	1 1	<i>09/19/17</i> 09/15/17 09/15/17	8021B 8015B 8015B		MS MS MS MS			

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Page 6 of 16



Laboratories							www.Gr	eenAnalytica	l.com	
DJR Operating		]	Project: TPH	I Ext.						
#20 CR 5060	Proj	ect Name / N	umber: AXI	Apache H-12	2			Report	ed:	
Bloomfield NM, 87413	Project Manager: Dianna Hamilton							09/21/17 17:07		
N. Contraction of the second se			E. Wall So	C1						
		17	09083-05 (S	Solid)						
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst	
Volatile Organic Compounds by EPA M Benzene*	lethod 8021 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS	
Valatile Organic Compounds by FPA	lethod 8021									
Benzene*	< 0.050	0.050	0.002	mg/kg	50				_	
Foluene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS	
Ethylbenzene*	< 0.050	0.050	0.004	mg/kg	50	09/19/17	8021B		MS	
Fotal Xylenes*	< 0.150	0.150	0.010	mg/kg	50	09/19/17	8021B		MS	
Fotal BTEX	< 0.300	0.300	0.018	mg/kg	50	09/19/17	8021B		MS	
Surrogate: 4-Bromofluorobenzene (PID)			100 %	72-148		09/19/17	8021B		MS	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10	<10.0	10.0	3.53	mg/kg	1	09/15/17	8015B		MS	
DRO >C10-C28	<10.0	10.0	2.04	mg/kg	1	09/15/17	8015B		MS	
EXT DRO >C28-C36	<10.0	10.0	2.04	mg/kg	1	09/15/17	8015B		MS	
Surrogate: 1-Chlorooctane			96.9 %	28.3-164		09/15/17	8015B		MS	
Surrogate: 1-Chlorooctadecane			102 %	34.7-157		09/15/17	8015B		MS	

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DJR Operating		F	Project: TPH	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12	2			Report	ed:
Bloomfield NM, 87413		Project Ma	anager: Dia	nna Hamilton				09/21/17	17:07
		]	E. Wall S	C2					
		170	)9083-06 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
olatile Organic Compounds by EPA N	Method 8021								
		0.050	0.002	mallea	50	00/10/17	8021B		MS
enzene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
enzene* 'oluene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
enzene* 'oluene* thylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
enzene* oluene* thylbenzene* otal Xylenes*	<0.050 <0.050 <0.050 <0.150	0.050	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50	09/19/17	8021B		MS
enzene* 'oluene* thylbenzene*	<0.050 <0.050 <0.050	0.050 0.050 0.150	0.002 0.004	mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17	8021B 8021B 8021B		MS MS
enzene* 'oluene* thylbenzene* 'otal Xylenes* 'otal BTEX	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
enzene* oluene* thylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
enzene* oluene* thylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 <i>102 %</i>	mg/kg mg/kg mg/kg 72-148	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
enzene* foluene* thylbenzene* fotal Xylenes* fotal BTEX urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID SRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 <i>102 %</i> 3.53	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B <i>8021B</i> 8021B		MS MS MS MS MS
enzene* oluene* thylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID FRO C6-C10 PRO >C10-C28	<0.050 <0.050 <0.050 <0.150 <0.300 <10.0 <b>18.3</b>	0.050 0.050 0.150 0.300 10.0	0.002 0.004 0.010 0.018 <i>102 %</i> 3.53 2.04 2.04	mg/kg mg/kg mg/kg 72-148 mg/kg mg/kg	50 50 50 1 1	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS

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DJR Operating		F	Project: TPI	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12	2			Reported:	
Bloomfield NM, 87413		Project Ma	anager: Dia	nna Hamilton				09/21/17	17:07
			W. Wall S	C1					
		170	9083-07 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Alatila Orașe la Companya de las EDA N	A-4h 1 90.21								
olatile Organic Compounds by EPA N	Aethod 8021								
enzene*	< 0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
ienzene* ioluene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
enzene*	< 0.050				50 50	09/19/17 09/19/17	8021B 8021B		MS MS
ienzene* ioluene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
enzene* 'oluene* thylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
ienzene* ioluene* ithylbenzene* iotal Xylenes*	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17	8021B 8021B 8021B		MS MS MS
ienzene* ioluene* ithylbenzene* iotal Xylenes* iotal BTEX	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
ienzene* ioluene* ithylbenzene* iotal Xylenes* iotal BTEX urrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS
enzene* oluene* thylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 <i>103 %</i>	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
enzene* oluene* ithylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID) retroleum Hydrocarbons by GC FID GRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300 <10.0	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 103 % 3.53	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B 8021B		MS MS MS MS MS
enzene* oluene* ithylbenzene* otal Xylenes* otal BTEX urrogate: 4-Bromofluorobenzene (PID) etroleum Hydrocarbons by GC FID GRO C6-C10 ORO >C10-C28	<0.050 <0.050 <0.150 <0.300 <10.0 <10.0	0.050 0.050 0.150 0.300 10.0	0.002 0.004 0.010 0.018 103 % 3.53 2.04 2.04	mg/kg mg/kg mg/kg 72-148 mg/kg mg/kg	50 50 50 1 1	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS

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Page 9 of 16



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DJR Operating		I	Project: TPI	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12				Report	ed:
Bloomfield NM, 87413		Project Ma	anager: Dia	nna Hamilton				09/21/17	17:07
			W. Wall S	C2					
		170	09083-08 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Valatila Oscaria Communada ha EDA N									
Volatile Organic Compounds by EPA M		0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Benzene*	< 0.050	0.050	0.002	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
Benzene* Foluene*		0.050 0.050 0.050	0.002 0.002 0.004	mg/kg mg/kg mg/kg					
Benzene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/19/17	8021B		MS
Benzene* Foluene* Ethylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/19/17 09/19/17	8021B 8021B		MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes*	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17	8021B 8021B 8021B		MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Eurrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B		MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 100 %	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX	<0.050 <0.050 <0.150 <0.300 <10.0	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 100 %	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/19/17	8021B 8021B 8021B 8021B 8021B 8021B		MS MS MS MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes* Fotal BTEX Surrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10 DRO >C10-C28	<0.050 <0.050 <0.150 <0.300 <10.0 <10.0	0.050 0.050 0.150 0.300 10.0	0.002 0.004 0.010 0.018 100 % 3.53 2.04 2.04	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50 1 1	09/19/17 09/19/17 09/19/17 09/19/17 09/19/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS MS

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Page 10 of 16



Laboratories							www.Gree	enAnalytica	l.com
DJR Operating			Project: TP	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12	2			Report	ed:
Bloomfield NM, 87413		Project M	anager: Dia	anna Hamilton				09/21/17	17:07
			Base SC	C1 .					
		17	09083-09 (	(Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Volatile Organic Compounds by EPA N Benzene*	<b>Method 8021</b>	0.050	0.002	mg/kg	50	09/20/17	8021B		MS
						09/20/17	8021B 8021B		MS
foluene*	<0.050 <0.050	0.050	0.002 0.004	mg/kg mg/kg	50 50	09/20/17	8021B 8021B		MS
Ethylbenzene*	< 0.150	0.030	0.004	mg/kg	50	09/20/17	8021B		MS
Fotal Xylenes* Fotal BTEX	< 0.300	0.130	0.018	mg/kg	50	09/20/17	8021B		MS
urrogate: 4-Bromofluorobenzene (PID)	40.500	0.500	99.5 %	72-148		09/20/17	8021B		MS
Petroleum Hydrocarbons by GC FID									
GRO C6-C10	<10.0	10.0	3.53	mg/kg	1	09/15/17	8015B		MS
DRO >C10-C28	14.7	10.0	2.04	mg/kg	1	09/15/17	8015B		MS
CXT DRO >C28-C36	10.0	10.0	2.04	ma /lea	1	09/15/17	8015B		
	<10.0	10.0	2.04	mg/kg	1	03/10/11	00100		MS
Surrogate: 1-Chlorooctane	<10.0	10.0		28.3-164	1	09/15/17	8015B		MS MS

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DJR Operating		F	Project: TPI	H Ext.					
#20 CR 5060	Proj	ect Name / N	umber: AX	I Apache H-12				Report	ed:
Bloomfield NM, 87413		Project Ma	anager: Dia	nna Hamilton				09/21/17	17:07
			Base SC	22					
		170	09083-10 (	Solid)					
Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
Volatile Organic Compounds by EPA N		0.050	0.002	malka	50	09/20/17	8021B		MS
Senzene*	< 0.050	0.050	0.002	mg/kg	50	09/20/17	8021B		MS
Senzene* 'oluene*	<0.050 <0.050	0.050	0.002	mg/kg	50	09/20/17	8021B		MS
Benzene* Foluene* Cthylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50	09/20/17 09/20/17	8021B 8021B		MS MS
Benzene* Foluene* Ethylbenzene* Fotal Xylenes*	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010	mg/kg mg/kg mg/kg	50	09/20/17	8021B		MS
Benzene* Foluene* Cthylbenzene*	<0.050 <0.050 <0.050	0.050 0.050	0.002 0.004	mg/kg mg/kg	50 50 50	09/20/17 09/20/17 09/20/17	8021B 8021B 8021B		MS MS
Benzene* Foluene* Cthylbenzene* Fotal Xylenes* Fotal BTEX	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/20/17 09/20/17 09/20/17 09/20/17	8021B 8021B 8021B 8021B		MS MS MS
Benzene* Foluene* Cthylbenzene* Fotal Xylenes* Fotal BTEX furrogate: 4-Bromofluorobenzene (PID)	<0.050 <0.050 <0.050 <0.150	0.050 0.050 0.150	0.002 0.004 0.010 0.018	mg/kg mg/kg mg/kg mg/kg	50 50 50	09/20/17 09/20/17 09/20/17 09/20/17	8021B 8021B 8021B 8021B		MS MS MS
Benzene* Foluene* Cthylbenzene* Fotal Xylenes* Fotal BTEX Furrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 101 %	mg/kg mg/kg mg/kg mg/kg 72-148	50 50 50	09/20/17 09/20/17 09/20/17 09/20/17 09/20/17	8021B 8021B 8021B 8021B 8021B		MS MS MS MS
Benzene* Foluene* Cthylbenzene* Fotal Xylenes* Fotal BTEX Fotal BTEX Furrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10	<0.050 <0.050 <0.050 <0.150 <0.300	0.050 0.050 0.150 0.300	0.002 0.004 0.010 0.018 101 % 3.53	mg/kg mg/kg mg/kg 72-148	50 50 50 50	09/20/17 09/20/17 09/20/17 09/20/17 09/20/17 09/15/17	8021B 8021B 8021B 8021B <i>8021B</i> 8021B		MS MS MS MS MS
Benzene* Foluene* Cthylbenzene* Fotal Xylenes* Fotal BTEX Furrogate: 4-Bromofluorobenzene (PID) Petroleum Hydrocarbons by GC FID GRO C6-C10 DRO >C10-C28	<0.050 <0.050 <0.050 <0.150 <0.300 <10.0 <10.0	0.050 0.050 0.150 0.300 10.0	0.002 0.004 0.010 0.018 101 % 3.53 2.04 2.04	mg/kg mg/kg mg/kg 72-148 72-kg mg/kg	50 50 50 1 1	09/20/17 09/20/17 09/20/17 09/20/17 09/20/17 09/15/17 09/15/17	8021B 8021B 8021B 8021B 8021B 8021B 8015B 8015B		MS MS MS MS MS MS

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Debbie Zufelt, Reports Manager



Laboratories		www.GreenAnalytical.com
DJR Operating	Project: TPH Ext.	
#20 CR 5060	Project Name / Number: AXI Apache H-12	Reported:
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/21/17 17:07

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Note
	Kesun	Linn	Units	Level	Result	70REC	Linns	KFD	Linit	Note:
Batch 7091802 - Volatiles										
Blank (7091802-BLK1)			Prep	ared: 09/18/	17 Analyze	ed: 09/19/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	0.0508		mg/kg	0.0500		102	72-148			
Benzene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
LCS (7091802-BS1)			Prep	ared: 09/18/	17 Analyze	ed: 09/19/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	0.0496		mg/kg	0.0500		99.2	72-148			
Benzene	1.95	0.050	mg/kg	2.00		97.6	79.5-124			
Ethylbenzene	1.87	0.050	mg/kg	2.00		93.5	77.7-125			
Toluene	1.79	0.050	mg/kg	2.00		89.6	75.5-127			
Total Xylenes	5.67	0.150	mg/kg	6.00		94.5	70.9-124			
LCS Dup (7091802-BSD1)			Prep	ared: 09/18/	17 Analyze	ed: 09/19/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	0.0506		mg/kg	0.0500		101	72-148			
Benzene	1.94	0.050	mg/kg	2.00		97.0	79.5-124	0.549	6.5	
Ethylbenzene	1.86	0.050	mg/kg	2.00		93.0	77.7-125	0.518	7.83	
Toluene	1.80	0.050	mg/kg	2.00		90.0	75.5-127	0.457	7.02	
Total Xylenes	5.65	0.150	mg/kg	6.00		94.2	70.9-124	0.307	7.78	
Batch 7091902 - Volatiles										
Blank (7091902-BLK1)			Prep	ared: 09/19/	17 Analyze	ed: 09/20/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	ND		mg/kg	0.0500		99.7	72-148			
Benzene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
LCS (7091902-BS1)			Prep	ared: 09/19/	17 Analyze	ed: 09/20/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	0.0498		mg/kg	0.0500		99.7	72-148			
Benzene	2.01	0.050	mg/kg	2.00		100	79.5-124			
Ethylbenzene	1.93	0.050	mg/kg	2.00		96.3	77.7-125			
Toluene	1.84	0.050	mg/kg	2.00		92.2	75.5-127			
Total Xylenes	5.74	0.150	mg/kg	6.00		95.7	70.9-124			
LCS Dup (7091902-BSD1)			Prep	ared: 09/19/	17 Analyze	ed: 09/20/1	7			
Surrogate: 4-Bromofluorobenzene (PID)	0.0499		mg/kg	0.0500		99.8	72-148			
			The	regulte in this -	anort apply to	the complet	analyzad in cos	ordance wit	the chain of	
Green Analytical Laboratories				ody document.		-	analyzed in acc			

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Debbie Zufelt, Reports Manager



Laboratories		www.GreenAnalytical.com
DJR Operating	Project: TPH Ext.	
#20 CR 5060	Project Name / Number: AXI Apache H-12	Reported:
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/21/17 17:07

#### Volatile Organic Compounds by EPA Method 8021 - Quality Control (Continued)

			Continu	ea)						_
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7091902 - Volatiles (Continued)										
LCS Dup (7091902-BSD1) (Continued)			Prep	ared: 09/19/	17 Analyz	ed: 09/20/1	7			

Les bup (///// bob/) (commutu)									
Benzene	1.96	0.050	mg/kg	2.00	98.1	79.5-124	2.29	6.5	
Ethylbenzene	1.89	0.050	mg/kg	2.00	94.5	77.7-125	1.88	7.83	
Toluene	1.82	0.050	mg/kg	2.00	91.0	75.5-127	1.40	7.02	
Total Xylenes	5.69	0.150	mg/kg	6.00	94.9	70.9-124	0.914	7.78	

#### Petroleum Hydrocarbons by GC FID - Quality Control

	D I	Reporting		Spike	Source	MARC	%REC	885	RPD	21
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 7091501 - General Prep - Organics										
Blank (7091501-BLK1)			Prep	ared & Anal	yzed: 09/15	5/17				
Surrogate: 1-Chlorooctadecane	54.3		mg/kg	50.0		109	34.7-157			
Surrogate: 1-Chlorooctane	49.8		mg/kg	50.0		99.7	28.3-164			
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C35	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
GRO C6-C10	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
LCS (7091501-BS1)			Prep	ared & Anal	yzed: 09/15	5/17				
Surrogate: 1-Chlorooctadecane	52.8		mg/kg	50.0		106	34.7-157			
Surrogate: 1-Chlorooctane	52.9		mg/kg	50.0		106	28.3-164			
DRO >C10-C28	203	10.0	mg/kg	200		102	81.4-124			
GRO C6-C10	192	10.0	mg/kg	200		96.1	76.6-119			
Total TPH C6-C28	395	10.0	mg/kg	400		98.8	79.4-121			
LCS Dup (7091501-BSD1)			Prep	ared & Anal	yzed: 09/15	5/17				
Surrogate: 1-Chlorooctadecane	51.0		mg/kg	50.0		102	34.7-157			
Surrogate: 1-Chlorooctane	52.6		mg/kg	50.0		105	28.3-164			
DRO >C10-C28	198	10.0	mg/kg	200		99.2	81.4-124	2.31	9.83	
GRO C6-C10	192	10.0	mg/kg	200		95.9	76.6-119	0.181	7.94	
Total TPH C6-C28	390	10.0	mg/kg	400		97.6	79.4-121	1.27	8.57	

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Debbie Zufelt, Reports Manager



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DJR Operating	Project: TPH Ext.	
#20 CR 5060	Project Name / Number: AXI Apache H-12	Reported:
Bloomfield NM, 87413	Project Manager: Dianna Hamilton	09/21/17 17:07
	Notes and Definitions	

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

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Debbie Zufelt, Reports Manager

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Page 15 of 16

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#### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 16 of 16

La	horatories	70) 247-4220 70) 247-4227	service 75 Su								green	nanal	ytical.	com										
Company or Client: DTR Operating (Midstream)				Bill to (if different):									ANALYSIS REQUEST											
Address: # 20 CR 5060				P.O. #:											- 5	3.5								
city: Bloomfield State: NM Zip: 87413				Company:														1						
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Contact Person: Diama Hamilton					Address:																			
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Project Name(option				State: Zip:																				
				Phone #:										1										
Sampler Name (Pri	Sampler Name (Print): Dlanna Hamilton					Email:																		
11日月日日	Collected				Matrix (check one) # of containers									1										
For Lab Use	Sample Name or Location	Date	Time	GROUNDWATER	SURFACEWATER	WASTEWATER	SOIL	DRINKING WATER	No preservation (general)	HNO <sub>3</sub>	HCI	H <sub>2</sub> SO <sub>4</sub>	Other: Other:	DTFU	DIEX	HdL								
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PLEASE NOTE: GAL's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed weived unless made in writing and receiver by GAL within 30 days after completion. In one went shall GAL be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affliates or successors arising out of or related to the performance of services hereunder by GAL readies of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 9/ 1/17	Received By:	ADDITIONAL REMARKS:	R	eport t	o State? (Circle)
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Relinquished Bv:	Date:	Received By:	980	1.		
	Time:		Temperature at Percept:	CHECKED BY		

† GAL cannot always accept verbal changes. Please fax or email written change requests.

\* Chain of Custody must be signed in "Reliquished By:" as an acceptance of services and all applicable charges.

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