Bob Hall

From:	Bob Hall
Sent:	Thursday, March 07, 2019 1:08 PM
То:	'jamos@blm.gov'; Weaver, Crystal; 'emnrd-ocd-district1spills@state.nm.us'
Cc:	'Michael Alves'
Subject:	1RP-5295 Site Activities Report and Request for Backfilling
Attachments:	1RP-5295.pdf; FINAL_Rojo AE Backfill Request.pdf

Please find attached a site activities report and a request for backfilling the subject site that was prepared by Michael Alves with Cajun Energy.

If you have questions or concerns, Michael and I are available at any time that is convenient for you.

Thanks,

Bob Hall BTA Oil Producers, LLC Closure Denied - CE 104 S. Pecos Street Midland, TX 79701 03 03 2020 bhall@btaoil.com

(432) 682-3753 (office) (432) 312-2203 (cell)

From: Hernandez, Christina, EMNRD < Christina.Hernandez@state.nm.us> Sent: Friday, December 28, 2018 4:09 PM To: Bob Hall <BHall@btaoil.com>; stucker@blm.gov Cc: Michael Alves <mike@cajun-energy.com>; Ben Grimes <BGrimes@btaoil.com> Subject: RE: Rojo AE Battery_Signed Release Notification Form C-141 for Dec 2 2018 Release

***** EXTERNAL EMAIL - Please use caution and **DO NOT** open attachments or click links from unknown or unexpected emails. *****

Ms. Hall:

Notes

- 1. Dated, geo-referenced photo documentation for verification that the initial response activities have been employed to contain the release is requested.
- 2. 19.15.29.13 NMAC, regulations of corresponding agencies supersede NMOCD's.
 - 1

The 1RP for this incident is

						25S-33E-	
5295	12/28/2018	А	BTA oil	Rojo AE 7811 JV-p Fed 001H	30-025-43476	27D	12

Please remember to include this 1RP identifier to all communications. Delineate and remediate per regulation NMAC 19.15.29 available at <u>http://164.64.110.134/parts/title19/19.015.0029.html</u>. Mind the timelines for submittal of requisite information.

Please be advised that NMOCD recommends a completed site characterization/delineation report be reviewed or approved by NMOCD BEFORE any significant remediation work towards closure.

Thanks, Christina Hernandez EMNRD-OCD Environmental Specialist 1625 N. French Drive Hobbs, NM 88240 575-393-6161 x111 Christina.Hernandez@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Bob Hall <<u>BHall@btaoil.com</u>>
Sent: Tuesday, December 4, 2018 3:54 PM
To: stucker@blm.gov; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>
Cc: Michael Alves <<u>mike@cajun-energy.com</u>>; Ben Grimes <<u>BGrimes@btaoil.com</u>>
Subject: [EXT] Rojo AE Battery Signed Release Notification Form C-141 for Dec 2 2018 Release

Please find attached a scan of the signed Release Notification for the Rojo AE 7811 JV-P Federal 001H (closest well) Tank Battery spill that took place on 12/2/2018.

BTA will continue to work with Mike at Cajun Energy to execute the Site Assessment, Remediation and Closure activities at this spill site.

If you have any questions or concerns, please call me anytime.

Bob.

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Bob Hall BTA Oil Producers, LLC 104 S. Pecos Street Midland, TX 79701

(432) 682-3753 (office) (432) 312-2203 (cell)

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03/04/2019



Site Activities

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Backfill Request

<u>1RP-5295</u>

Rojo AE 7811 JV-P Federal 001H (Closest Well)

UL-D, Sec. 27-T25S-R33E

API # 30-025-43476

Prepared by:

Michael Alves Environmental Department Cajun Energy 831 East Highland Hobbs, NM 88240 Phone: (575) 631-4310 <u>mike@cajun-energy.com</u>

03/04/2019

BTA Oil Producers has retained Cajun Energy to address environmental issues for the site detailed herein.

The Rojo AE 7811 JV-P Federal 001H (API # 30-025-43476) is the closest well to this Production Facility and Tank Battery located west of Jal, Lea County, NM. According to the New Mexico Office of the State Engineer, the Minimum Depth to Water is 214 feet. (Appendix II).

As written in the C-141 filed on December 4, 2018 with the BLM/NMOCD, the release was caused by a frozen dump valve resulting in a vessel pressuring up and blowing oil and produced water out of the "pop off". (Appendix I) An estimated 350 BBL of oil and 35 BBL of produced water was released, of those volumes, 200 BBL of oil and 20 BBL of produced water were recovered. Since the spill volume was greater than 25 BBL, this spill is classified as a major release in accordance with NMOCD Rules. Subsequently, the release was assigned Incident #NCH1836251271 and District RP #1RP-5295.

On December 2, 2018, the day of the release, Cajun Energy was called to the location to perform emergency spill response activities. Cajun Energy made an emergency "One Call" dig alert and started spill remediation. Starting on December 2, 2018, the immediate remediation of the site commenced by excavating visibly soaked soil and stockpiling the soil onto a 6ml plastic liner. This timely effort stopped the downward migration of oil.

Excavation, stockpiling and disposal activities were performed through mid-December. From mid-December to mid-January, the primary activity was removal of the remaining impacted soil for disposal. A total of 5,430 cubic yards of soil were sent for disposal at Sundance Services, Inc. in Eunice, NM.

During excavation activities, samples for field testing were taken from 10 locations (SP1 through SP10) at points from surface down to 2' BGS (below ground surface). (Appendix III) Field testing on the samples used a titration process to estimate total chloride concentration and a PID meter was used to indicate the presence of volatile hydrocarbons in soil (inferring a concentration of TPH).

The excavation activity began with an initial scraping of up to 1' of obvious oil-soaked soil in the area of sample locations SP1 through SP10. Following the initial scraping, soil near sample locations SP1 and SP2 was left as is, due to field screening results and as confirmed with lab results. Using field screening and visual cues, an additional 1' of obviously impacted oil-soaked soil was removed in the vicinity of sample locations SP3 through SP10, resulting in a total of 2' BGS depth excavated from those portions of the spill area. (Appendix V)

When a soil sample at a location was field tested and indicated the presence of contaminant concentrations at a level below clean-up requirements, an additional soil

03/04/2019

Page 6 of 39

sample was taken at the same location at a point that was one foot deeper as confirmation. The second "deeper" sample was then taken to Cardinal Labs for lab analysis. Sample locations SP1 and SP2 were below clean-up requirements at their respective points located between surface and 1' BGS. All samples taken from sample locations SP3 through SP10 were below clean-up requirements at each point located between 1' and 2' BGS. (Appendix VI).

Inside of the lined secondary containment area, the tanks and equipment were washed as was the interior of the secondary containment. All waste water was taken to a BTA SWD for proper disposal.

At the completion of the emergency response activity at the present site, all impacted soil containing concentrations of TPH and Chlorides above the regulatory action levels has been removed. Field testing of bottom soil samples defined the limits of the impacted area and those limits are confirmed with lab analyses of additional soil samples at points located generally 1' deeper.

On behalf of BTA Oil Producers, Cajun Energy respectfully requests approval to backfill the site herein. The proposed work to be conducted by Cajun Energy will be to backfill and compact the site using clean imported soil and caliche. The surrounding area will be contoured to the excavation and then seeded with a native blend of seed, which in this case is LPC. The seed blend will be free of noxious weeds.

A site map is included in the Appendices and pictures (Appendix IV) have been included to provide additional information about the release and the scope of the emergency response activities. A closure report will be submitted to BLM/NMOCD along with all supporting documentation to provide closure to this release.

If you have any questions or concerns, please feel free to contact me.

Respectfully,

while the

Michael Anthony Alves Cajun Energy – General Manager 575-631-4310 <u>mike@cajun-energy.com</u>

Appendix IC-141Appendix IIGroundwater SearchAppendix IIISite MapAppendix IVSite PhotosAppendix VSample TableAppendix VILab Data

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03/04/2019

Appendix I

C-141

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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 Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NCH1836251271
District RP	1RP-5295
Facility ID	
Application ID	pCH1836251636

Release Notification

Responsible Party

Responsible Party	BTA Oil Producers	OGRID 260297
Contact Name	Ben Grimes	Contact Telephone (432) 682-3753
Contact email	bgrimes@btaoil.com	Incident # NCH1836251271 ROJO AE 7811 JV-P
Contact mailing add	dress 104 S. Pecos St., Midland, TX	K 79701 FED 001H @ 30-025-43476

Location of Release Source

Latitude 32.107610

Longitude -103.56410 (NAD 83 in decimal degrees to 5 decimal places)

Site Name Rojo AE 7811 JV-P Fed 001H (closest well)	Site Type Tank Battery
Date Release Discovered 12/02/2018	API# (if applicable) 30-025-43476

Unit Letter	Section	Township	Range	County
D	27	25S	33E	Lea

Surface Owner: State Federal Tribal Private (Name: _

Nature and Volume of Release

Materi	al(s) Released (Select all that apply and attach calculations or spec	ific justification for the volumes provided below)
Crude Oil	Volume Released (bbls) 350 BBL	Volume Recovered (bbls) 200 BBL
Produced Water	Volume Released (bbls) 35 BBL	Volume Recovered (bbls) 20 BBL
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

A dump valve froze into a closed position on the separator, causing the vessel to pressure up and the high pressure relief valve (pop-off) to open to prevent rupture of the vessel and the incoming lines.

Form C-141	State of New Mexico	Incident ID	
Page 2	Oil Conservation Division	District RP	
		Facility ID	
		Application ID	
Was this a major release as defined by	If YES, for what reason(s) does the responsible par	ty consider this a major release?	

release as defined by 19.15.29.7(A) NMAC?	
Yes 🗌 No	The spill volume was greater than 25 BBL, which the NMOCD Rules define as a major release
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Email sent to Shelly Tu on 12/2/2018 at 9:02 P	icker, BLM, and Christina Hernandez, NMOCD, by Michael Alves, Cajun Energy, M.

Initial Response

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

The source of the release has been stopped.

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

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

If All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

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Printed Name: Ben Grimes	Title: Production Manager
Signature: Bendrins	Date: 12/4/ 18
email:bgrimes@btaoil.com	Telephone: (432) 682-3753
OCD Only	
Received by:	Date:

Release Notification for 12/2/2018 Incident

Calculations for Rojo AE 7811 JV-P Federal 001H (nearest well)

• The impacted area outside of the tank battery containment was calculated as follows:



- Plus: 220 BBL was contained and recovered from the tank battery secondary containment area.
- Plus: Estimated 25 BBL fluid remains inside secondary containment spread across the top of the tanks, vessels and piping.

Total volume reported: 385 BBL

At 10% Water Cut, Volumes in this Release Notification estimate are:

Crude Oil: 350 BBL

Produced Water: 35 BBL

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BTA OIL PRODUCERS

03/04/2019

Appendix II

Groundwater Search

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD has been replace O=orphaned, C=the file is closed)	d,	(qua (qua	irter	rs a rs a	re 1= re sm	NW 2	2=NE ∷ st to lai	3=SW 4=SI rgest) (N	E) JAD83 UTM in m	neters)	(In feet)	
	POD Sub-	_	Q	Q	Q			_				Depth	Depth	Water
J 00005 POD1	Code basin	Count	y 64 2	16 2	4	Sec 1	7ws 26S	Rng 35E	X 659200	Y 3547174* 🥌	23510	601	230	Column 371
<u>J 00001</u>	J	LE	1	1	3	18	26S	36E	659416	3546374*	23939	550	253	297
J 00002 X3	J	LE		3	1	19	26S	36E	659536	3545067* 🌍	24463	710	216	494
J 00002 X2	J	LE		4	3	18	26S	36E	659929	3545879* 🌍	24575	650	214	436
J 00001 X	J	LE	2	4	1	19	26S	36E	660042	3545173* 🌍	24905	640	250	390
J 00027 POD1	J	LE	1	2	2	30	26S	36E	660612	3543961 🌍	25858	571	285	286
J 00033 POD1	J	LE	2	4	2	30	26S	36E	660767	3543426 🌍	26200	551	250	301
J 00034 POD1	J	LE	2	4	2	30	26S	36E	660869	3543643 🌍	26214	506	250	256
J 00035 POD1	J	LE	2	4	2	30	26S	36E	660923	3543521 🌍	26309	506	250	256
J 00004 POD1	J	LE	4	1	3	29	26S	36E	661366	3542970 🌍	26928	604	270	334
J 00004 CLW458813	O J	LE			3	29	26S	36E	661392	3542882* 🤤	26986	604	270	334
J 00009 POD1	J	LE		4	4	09	26S	36E	663924	3547554* 🌍	28016	175		
J 00008 POD1	J	LE		3	3	10	26S	36E	664327	3547560* 🌍	28409	175		
J 00025 POD2	J	LE	3	4	4	21	26S	36E	663984	3544155 🌍	28965	800		
										Avera	age Depth to	Water:	248	feet
											Minimum	Depth:	214	feet
											Maximum	Depth:	285	feet
Record Count: 14														
Basin/County Search	<u>:</u>													
Basin: Jal														
UTMNAD83 Radius So	earch (in met	ers):												

Easting (X): 636508.6

Northing (Y): 3553326

Radius: 30000

*UTM location was derived from PLSS - see Help

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

Appendix III

Site Map

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03/04/2019



Appendix IV

Site Photos

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03/04/2019





Aerial View of spill



Spill Northeast View



Spill Looking west



Spill Looking west



Spill Looking South



Spill Looking Southeast



Spill looking southeast



Looking Northeast

03/04/2019



Clean-up



Clean-up



Clean-up



Clean-up



Clean-up

Appendix V

Sample Table

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03/04/2019

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Rojo AE Tank Battery Release - December 2, 2018 OCD Tracking #: 1RP-5295

			Comula	Field Sc	reening	ng Laboratory Results										
Location	CDC Coordinates	Sample	Sample		Titration			TPH				Ethyl-	Total	TPH	TPH	TPH
Location	GPS Coordinates	Date	(feet BCS)	PID Result	Result	Chloride	Total TPH	GRO + DRO	BTEX	Benzene	Toluene	benzene	Xylenes	GRO	DRO	Ext DRO
			(leet bd3)	(PPM)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SP1		12/6/18	Surface	30.0	224											
SP1		12/6/18	1	0	174											
SP1		12/6/18	2			64.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP2		12/6/18	Surface	30.9	274											
SP2		12/6/18	1	2.1	199											
SP2		12/6/18	2	0	249	48.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP3		12/6/18	Surface	0	224											
SP3		12/6/18	1	25.5	124											
SP3		12/6/18	2	0	399											
SP3		12/6/18	3	0	174	48.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP4		12/6/18	Surface	90.5	3,473											
SP4		12/6/18	1	104.5	499											
SP4		12/6/18	2	0	274											
SP4		12/6/18	3	0	199	16.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP5		12/6/18	Surface	99.5	449											
SP5		12/6/18	1	63.9	374											
SP5		12/6/18	2	0	299											
SP5		12/6/18	3	0	249	32.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP6		12/6/18	Surface	49.2	549											
SP6		12/6/18	1	78.2	474											
SP6		12/6/18	2	0	249											
SP6		12/6/18	3	0	199	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP7		12/6/18	Surface	1345	4,273											
SP7		12/6/18	1	434.9	624											
SP7		12/6/18	2	0	999											
SP7		12/6/18	3	0	624	320	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP8		12/6/18	Surface	227.5	2,824											
SP8		12/6/18	1	50.8	249											
SP8		12/6/18	2	3.4	224											
SP8		12/6/18	3	0	174	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SP9		12/6/18	Surface	361.8	249											
SP9		12/6/18	1	21.6	199											
SP9		12/6/18	2	0	174											
SP9		12/6/18	3	0	124	32.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Rojo AE Tank Battery Release - December 2, 2018 OCD Tracking #: 1RP-5295

			Samula	Field Sc	reening	Laboratory Results											
1	CDC Consultantes	Sample	Sample		Titration			ТРН				Ethyl-	Total	TPH	TPH	TPH	
Location	GPS Coordinates	Date	(fact DCC)	PID Result	Result	Chloride	Total TPH	GRO + DRO	BTEX	Benzene	Toluene	benzene	Xylenes	GRO	DRO	Ext DRO	
			(leet BGS)	(PPM)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
SP10		12/6/18	Surface	114.6	574												
SP10		12/6/18	1	13.9	424												
SP10		12/6/18	2	0	249												
SP10		12/6/18	3	0	199	32.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

NMOCD Table 1 - Closure Criteria for Soils Impacted by a Release (19.15.29.12)

Minimum Depth to GW less than 10,000 mg/l TDS

<= 50'	600	100	-	50	10
51' - 100'	10,000	2,500	1,000	50	10
>100'	20,000	2,500	1,000	50	10

Reporting Limits:

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Chlorides: 16.0 mg/kg Benzene, Toluene, Ethylbenzene: 0.050 mg/kg for each analyte Total Xylenes: 0.150 mg/kg Total BTEX: 0.300 mg/kg

GRO (C6 - C10), DRO (>C10 - C28), Ext DRO (>C28 - C36): 10.0 mg/kg for each analyte

Appendix VI

Lab Data

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03/04/2019

SP.1+Z



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 22, 2019

BOB HALL

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: ROJO AE #001

Enclosed are the results of analyses for samples received by the laboratory on 01/17/19 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



BTA Oil Producers BOB HALL 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received: Reported: Project Name:	01/17/2019 01/22/2019 ROJO AE #001 NONE GIVEN	Sampling Date: Sampling Type: Sampling Condition: Sample Received By:	01/17/2019 Soil Cool & Intact Jodi Henson
Project Number:		Sample Received by:	Jour Henson
Project Location:			

Sample ID: SP 1 @ 2' (H900165-01)

BTEX 8021B	mg/	Ng	Analyze						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2019	ND	2.15	108	2.00	2.09	
Toluene*	<0.050	0.050	01/21/2019	ND	2.24	112	2.00	3.71	
Ethylbenzene*	<0.050	0.050	01/21/2019	ND	2.29	115	2.00	9.35	
Total Xylenes*	<0.150	0.150	01/21/2019	ND	6.64	111	6.00	6.56	
Total BTEX	<0.300	0.300	01/21/2019	ND					

Analyzed By: MS

Surrogate: 4-Bromofluorobenzene (PIE 97.7 % 73.3-129

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	01/21/2019	ND	432	108	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/18/2019	ND	240	120	200	0.290	
DRO >C10-C28*	<10.0	10.0	01/18/2019	ND	231	116	200	0.112	
EXT DRO >C28-C36	<10.0	10.0	01/18/2019	ND					
Surrogate: 1-Chlorooctane	92.8	% 41-142	2						
Surrogate: 1-Chlorooctadecane	92.9	% 37.6-14	17						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardnal'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 client for analyses. All claims, induding those for negligence and any other cause Whatbaever, shall be deemed waived unless made in writing and received by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be lable for incidental or consequential damages, including, without limitation, busness interruptons, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardnal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardnal Laboratories.

Cellery Z. Keene-



BTA Oil Producers BOB HALL 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	01/17/2019	Sampling Date:	01/17/2019
Reported:	01/22/2019	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 2 @ 2' (H900165-02)

BTEX 8021B	mg/	kg	Analyze	u by: 145					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/21/2019	ND	2.15	108	2.00	2.09	
Toluene*	<0.050	0.050	01/21/2019	ND	2.24	112	2.00	3.71	
Ethylbenzene*	<0.050	0.050	01/21/2019	ND	2,29	115	2.00	9.35	
Total Xylenes*	<0.150	0.150	01/21/2019	ND	6.64	111	6.00	6.56	
Total BTEX	<0.300	0.300	01/21/2019	ND					

Analyzed Dry MC

Surrogate: 4-Bromofluorobenzene (PID 104 % 73.3-129

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/21/2019	ND	432	108	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/18/2019	ND	240	120	200	0.290	
DRO >C10-C28*	<10.0	10.0	01/18/2019	ND	231	116	200	0.112	
EXT DRO >C28-C36	<10.0	10.0	01/18/2019	ND					
Surrogate: 1-Chlorooctane	94.4	% 41-142	2						
Surrogate: I-Chlorooctadecane	92.9	% 37.6-14	7						

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Cellecy Z. Areane -



Notes and Definitions

QR-02The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC
batch were accepted based on percent recoveries and completeness of QC data.NDAnalyte NOT DETECTED at or above the reporting limitRPDRelative Percent Difference**Samples not received at proper temperature of 6°C or below.***Insufficient time to reach temperature.-Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name	BTA oil Produce	~			_	T		B	LL	TO						ANALYSIS REQUEST
Project Manager	Bob Hall					Ρ.	0. #:						1	1		
Address:						C	ompa	iny:	G	47						
City:	State:	Zip	2.			A	tn:	B	do	the	11					
Phone #:	Fax #:					A	ddres	ss;								
Project #:	Project Owne	r .				Ci	ty:					1				
Project Name:						St	ate:		Zip							
Project Location	ROJO AE # CO1					P	none	#:						- 1		
Sampler Name:	Michael Ales		_			Fa	ex #:									
FOR LAE USE ONLY	P.		1	MA	TRIX		PRE	SERV		SAMPL	ING					
Lab I.D.	Sample I.D.	(G)RAB OR (C)ON	# CONTAINERS	GROUNDWATER WASTEWATER SOIL	OIL	SLUDGE OTHFR :	ACID/BASE:	ICE / COOL OTHER	I	DATE	TIME	a	- 1	Rt	BICK	×
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PLEASE NOTE: Lookity or analyses, All clams include	Company, Caranal's tability and demit exclusive remety for to trace for pegipente and any other cause whatsperier shall be	any cha	ura . ed wait	ing whether built red unless made	n anita	g and rei	eri, seei seived b	be limite y Cardina	d to the I within	30 days al	ild by the chent ler completion e	for the app	licable			
service. In no event shall C all totes or successors and	andinal be liable for incidental ar consequental comoges, include to set of or ministed 10 km period and to some cash opposite by	ng wétho Counting	out liner	tation, business in Indiass of whether	iterrusti Suttin d	ons, loss takin is bi	ol use,	or loss of in any of	profits ne abo	incurred by	client, its subsi- carons or differ	dianes				
Relinguished B	y: Date: /// ///// //me:/// ///// //// Date:	R		ved By:		A	er	s	0	n	Phone R Fax Res REMAR	lesult: ult: KS:	: 0] Yes] Yes		□ No Add" Phone #: □ No Add" Fax #:
	Time:	1										P	ik	و (B) C	ason - energy, com
Delivered By Sampler - UPS	: (Circle One) - Bus - Other: -11.7°/#	9	7	Sample Cool	Inta		1	CHEC	KED	Ŧ						
	Contraction of the Contraction o	-	-	LN		NO	-	-	-		la constante		-		_	

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2328

Page 28 of 39



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 26, 2018

MICHAEL ALVES

BTA Oil Producers

103 South Pecos

Midland, TX 79701

RE: ROJO AE #001

Enclosed are the results of analyses for samples received by the laboratory on 12/21/18 10:07,

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 3 @ 3' (H803756-01)

BTEX 8021B	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88.8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL 102 % 73.3-129

Chloride, SM4500CI-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	g Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2.44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	108	% 41-142							
Surrogate: 1-Chlorooctadecane	110 9	% 37.6-147	7						

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Calley L. Keine



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 4 @ 3' (H803756-02)

BTEX 8021B	mg/	кg	Analyze	U BY: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88,8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0,300	0.300	12/21/2018	ND					

Annhunged Day MC

Surrogate: 4-Bromofluorobenzene (PIL 105 % 73,3-129

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2.44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	106 %	6 41-142	,						
Surrogate: 1-Chlorooctadecane	109 %	6 37.6-14	7						

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BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 5 @ 3' (H803756-03)

DIEN OUZID	ilig/	ĸġ	Analyze	a by 145					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88.8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/2 1/20 18	ND					

Applyzed By: MS

Surrogate: 4-Bromofluorobenzene (PID 96.2 % 73,3-129

Chloride, SM4500Cl-B	mg/kg		Analyze	Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1,11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2.44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	108	% 41-142							
Surrogate: 1-Chlorooctadecane	109	% 37.6-14	7						

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Cellerg Z. Kerne -



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 6 @ 3' (H803756-04)

BIEX 8021B	mg/kg		Analyzeu by: MS							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2,00	4.56		
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92		
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1,78	88.8	2.00	4.27		
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64		
Total BTEX	<0.300	0.300	12/21/2018	ND						

Analyzed By MC

Surrogate: 4-Bromofluorobenzene (PID 97,3 % 73,3-129

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2,44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	104 9	% 41-142	,						
Surrogate: 1-Chlorooctadecane	103 9	% 37.6-14	7						

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Celleg L. Keine -

Celey D. Keene, Lab Director/Quality Manager



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 7 @ 3' (H803756-05)

BIEX 8021B	mg/	ĸg	Analyze	u by, 145					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88.8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/21/2018	ND					

Applyroad Byr MC

Surrogate: 4-Bromofluorobenzene (PIL 95.0 % 73.3-129

Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2,44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	97.3	% 41-142	,						
Surrogate: 1-Chlorooctadecane	96.8	% 37.6-14	7						

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BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 8 @ 3' (H803756-06)

BTEX 8021B	mg/	/ Kg	Analyze	аву;мэ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1,78	88.8	2.00	4,27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5,23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/21/2018	ND					

Surrogate: 4-Bromofluorobenzene (PIL 97.8 % 73.3-129

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/21/2018	ND	416	104	400	3.77	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2,44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	98.1	% 41-142	•						
Surrogate: 1-Chlorooctadecane	95.8	% 37.6-14	7						

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*=Accredited Analyte

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Cellery L. Kenne -



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 9 @ 3' (H803756-07)

BTEX 8021B	mg)/кд	Analyze	a by: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88.8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/21/2018	ND					

Annalyzed Barr MC

Surrogate: 4-Bromofluorobenzene (PIL 98.2 % 73.3-129

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/21/2018	ND	416	104	400	3.92	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2.44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	92,6	% 41-142	2						
Surrogate, 1-Chlorooctadecane	91.6	% 37.6-14	7						

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Celey There



BTA Oil Producers MICHAEL ALVES 103 South Pecos Midland TX, 79701 Fax To: (432) 683-0312

Received:	12/21/2018	Sampling Date:	12/16/2018
Reported:	12/26/2018	Sampling Type:	Soil
Project Name:	ROJO AE #001	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SP 10 @ 3' (H803756-08)

BIEX 8021B	mg/	кg	Analyze	u by: M3					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/21/2018	ND	1.81	90.5	2.00	4.56	
Toluene*	<0.050	0.050	12/21/2018	ND	1.80	90.0	2.00	3.92	
Ethylbenzene*	<0.050	0.050	12/21/2018	ND	1.78	88.8	2.00	4.27	
Total Xylenes*	<0.150	0.150	12/21/2018	ND	5.23	87.2	6.00	3.64	
Total BTEX	<0.300	0.300	12/21/2018	ND					

Annalises of Data MC

Surrogate: 4-Bromofluorobenzene (PIL 98.8 % 73.3-129

Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/21/2018	ND	416	104	400	3.92	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/21/2018	ND	199	99.4	200	1.11	
DRO >C10-C28*	<10.0	10.0	12/21/2018	ND	221	111	200	2.44	
EXT DRO >C28-C36	<10.0	10.0	12/21/2018	ND					
Surrogate: 1-Chlorooctane	98,2	% 41-142	,						
Surrogate: 1-Chlorooctadecane	96.3	% 37.6-14	7						

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Celery L. Keine



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
1	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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College Frence



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	(575) 393-2326 FAX (575) 393-247	76																								
Company Name: BTA OIL Producero								BILL TO							ANALYSIS REQUEST											
Project Manager: Michael Alles									P.O. #:							1		T	1	T				1		1
Address:									Company: BTA						k –											
City: State: Zip:									Attin: Brunn Davis						1											
Phone #: Fax #:								Address:							1											
roject #: Project Owner:								City:						1	1											
Project Name:								State: Zip:																		
Project Location: 20 JO AE 1001							Phone #:																			
Sampler Name: Michael Alles							Fax #:							1												
FOR LAB USE ONLY	OR LAB USE ONLY				MATRIX				PRESERV. SAMP				NG	1												
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+ Cardinal cannot accept verbal changes. Please fax written changes to (575) 395-2326

Cool Intact Yes Yes No No