

### Closure Report

September 13, 2019

RGGVV-190916-C-1410

Re: Cedar Lake Federal CA 737H API# 30-015-40901 Case # 2RP-4972

To: Robert Hamlet

New Mexico Oil Conservation Division Energy, Minerals and Natural Resources Department 811 S. 1st Street Artesia, NM 88210

On 9/16/2018 a release occurred due to a 2 inch tee on the well head failed. An initial C-141 was sent to NMOCD and approved by NMOCD on 9/18/2018. A remediation plan was submitted and approved by NMOCD on May 10, 2019. The Cedar Lake Federal CA 737H is located east of Loco Hills in unit letter A section 7 township 17S range 31E (GPS Coordinates: 32.85432, -103.90390).

On May 31, 2019 final 5 point bottom and wall composite samples were collected in the pasture area of the release in accordance with the NMOCD approved remediation plan and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results indicated that BFC 1 chloride values were above the threshold of 600 mg/kg. BFC 1 was further excavated to a depth of 1.5 feet and a 5 point bottom composite sample was collected on June 11, 2019 and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. The laboratory results were below threshold for releases in a pasture.

On June 11, 2019 final 5 point bottom and wall composite samples were collected on the lease pad in accordance with the NMOCD approved remediation plan and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results indicated that BFC 16, 21, 22, 23, and 26 had TPH levels above table one standards for releases greater than 100 feet to groundwater. Those sample point areas were further excavated to a depth of 1 foot. On June 19, 2019 5 point bottom composite samples were collected and submitted to a commercial laboratory for analysis of TPH and BTEX. All laboratory results were below table one standards for releases greater than 100 feet to groundwater.

On July 7, 2019 final 5 point bottom composite samples were collected in an area that was missed during the sampling event on June 11, 2019 and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results indicated that BFC 27 and 28 were above table one standards chloride and TPH. Those areas were excavated to a depth of 3 inches and final bottom composite samples were collected and submitted to a commercial laboratory for analysis of chloride and TPH. Laboratory results were below table one standards for releases greater than 100 feet to groundwater.

All excavated soil was exported to an NMOCD approved disposal facility. The pad excavation was backfilled with clean imported caliche and contoured to the surrounding area. The pasture

area was backfilled with clean imported top soil and contoured to the surrounding area. The pasture area was reseeded with BLM # 2 seed mixture.

Apache Corporation has completed the remediation in accordance with the NMOCD approved remediation plan and respectfully request that 2RP-4972 be closed.

Enclosed: C-141, maps, data table, laboratory results, field notes, and photos.

Submitted by;

Bruce Baker
Environmental Technician

larry.baker@apachecorp.com

Cell# 432-631-6982 Off# 575-393-7106 District I 1625 N French Dr., Hobbs, NM 88240 District III 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	NMAP1826165680
District RP	2RP-4972
Facility ID	N/A
Application ID	pMAP1826165277

### **Release Notification**

Responsible Party	Apache Corp.			OGRID	873
Contact Name Bruce Baker			Contact Te		
Contact email	rry , baker @		com	Incident #	(assigned by OCD)
Contact mailing addre		0.0	arla.	nd BLI	10 Hobbs. NM 88240
		Location			
atitude	5482		.191	Longitude	-103.90390
		(NAD 83 m d	ecimal deg	rees to 5 decim	nal places)
Site Name Cedar	LAKE Feder	A CA 178	37H	Site Type	oil well
Date Release Discover	ed 9/16/18			API# (if app	dicable) 30-015-40901
Unit Letter   Section		Range	1	Coun	ity
A 7	175			Eddy	
	113	31E		E POLU	
urface Owner: 🔲 Sta	te 🗹 Federal 🗀 Ti	ribal 🔲 Private (	(Name_	-	)
Mate Oil	vital(s) Released (Select a	Nature an	d Vol	ume of I	Volume Recovered (bbls) 15 barrels
Mat	Volume Release	Nature and attacked (bbls) 26 ad (bbls) 52	d Vol	ume of I	Volume Recovered (bbls) 35 barrels
Mate Oil	Volume Release Volume Release Is the concentral	Nature and attacked (bbls) 26 dd (bbls) 52 dd (bbls) 52 dd (bbls) 52 dd (bbls) 52	d Vol	ume of I	Volume Recovered (bbls) 15 barrels
Mate Oil	Volume Release Volume Release Is the concentral	Nature and that apply and attacked (bbls) 26 ad (bbls) 52 attacked (bb	d Vol	ume of I	Volume Recovered (bbls) 35 barrels
✓ Crude Oil ✓ Produced Water	Volume Release Volume Release Is the concentratin the produced	Nature and lithat apply and attacked (bbls) 26 dd (bbls) 52 dion of total disso water >10,000 m dd (bbls)	d Vol	ume of I	Volume Recovered (bbls)  Volume Recovered (bbls)  Volume Recovered (bbls)  Yes No
Mater Mater Mater Condensate	Volume Released  Volume Release  Volume Release  Is the concentration the produced  Volume Release  Volume Release	Nature and lithat apply and attacked (bbls) 26 dd (bbls) 52 dion of total disso water >10,000 m dd (bbls)	d Vol	ume of I	volume Recovered (bbls) 35 barrels  Volume Recovered (bbls) 35 barrel  Volume Recovered (bbls) 35 barre  Volume Recovered (bbls)
Mater V Crude Oil  Produced Water  Condensate  Natural Gas  Other (describe)  Cause of Release	Volume Release Volume Release Is the concentration the produced Volume Release Volume Release Volume Release Volume/Weight	Nature and all that apply and attacked (bbls)  add (Mcf)  Released (providence)	d Vol	ume of I	Volume Recovered (bbls)  Volume Recovered (Mcf)  Volume/Weight Recovered (provide units)
Mater V Crude Oil  Produced Water  Condensate  Natural Gas  Other (describe)  Cause of Release	Volume Released  Volume Release  Volume Release  Is the concentration the produced  Volume Release  Volume Release	Nature and all that apply and attacked (bbls)  add (Mcf)  Released (providence)	d Vol	ume of I	Volume Recovered (bbls)  Volume Recovered (Mcf)  Volume/Weight Recovered (provide units)

### State of New Mexico Oil Conservation Division

Incident ID	NMAP1826165680
District RP	2RP-4972
Facility ID	N/A
Application ID	pMAP1826165277

Was this a major release as defined by		sponsible party consider this a major release?
19.15.29.7(A) NMAC?	release was areat	er than 25 barrels of total fluid
✓ Yes □ No	10,00,00	
If YES, was immediate no	otice given to the OCD? By whom? To	whom? When and by what means (phone, email, etc)?
T 1. 1	1	
Immediate	notice was provided	by Bruce Baker to Jim Griswold, Mike Bratche
Via email	م 7:02 هم 7:03 هم Initial	Response
The responsible j	party must undertake the following actions immedi	hately unless they could create a safety hazard that would result in injury
The source of the rele		
	s been secured to protect human health a	
		or dikes, absorbent pads, or other containment devices.
	ecoverable materials have been removed	
If all the actions described	d above have <u>not</u> been undertaken, expla	ain why:
-		
		ce 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 info	rmation given above is true and complete to	the best of my knowledge and understand that pursuant to OCD rules and
		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 o and/or regulations.	f a C-141 report does not relieve the operator	r of responsibility for compliance with any other federal, state, or local laws
Printed Name: Bru	- Raves	Title: Environental Tech. SR.
Signature: Bune	Baha	Date: <b>9//8//8</b>
email: larry bal	Ker Papachecorp. com	Telephone: 432-631-6992
	·	
OCD Only		
1	111111	- 0044040
Received by:	roove	Date: 09/18/18

### Volume CAlculation

Affected Area = 480ft.3 x 7.48 = 3,590 gallows /42 = 85.47 bbls

85.47 x.33 soil porosity = 28.20 + 50 recovered = 78 barrels

### State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

### Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date

What is the shallowest depth to groundwater beneath the area affected by the release?	NONE (ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes 📝 No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes 🗹 No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes 🗹 No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes 🗹 No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Yes V No		
Are the fateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes V No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes 🗹 No		
Are the lateral extents of the release within 300 feet of a wetland?	Yes M No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes 🗹 No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes 🗹 No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes 🗹 No		
Did the release impact areas not on an exploration, development, production, or storage site?	✓ Yes   No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.  Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.  Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps Laboratory data including chain of custody			

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

### State of New Mexico Oil Conservation Division

regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by failed to adequately investigate and remediate contamination that pose	o the best of my knowledge and understand that pursuant to OCD rules and e notifications and perform corrective actions for releases which may endanger the OCD does not relieve the operator of liability should their operations have a threat to groundwater, surface water, human health or the environment. In or of responsibility for compliance with any other federal, state, or local laws
Printed Name: Bruce Baker Signature: Bruce Baker	Title: <u>Environmental</u> Tech SR  Date: 12-14-18
email: larry. baker @ apachecorp.com	Telephone: 432-631-6982
OCD Only  Received by: Robert Hamlet	Date: 5/10/2019

### State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	,

### **Remediation Plan**

Remediation Plan Checklist: Each of the following items must	be included in the plan.
Detailed description of proposed remediation technique	
Scaled sitemap with GPS coordinates showing delineation po	nts
Estimated volume of material to be remediated  Closure criteria is to Table 1 specifications subject to 19.15.2	) 12(CV4) NM4C
Proposed schedule for remediation (note if remediation plan t	meline is more than 90 days OCD approval is required)
<u> </u>	
Deferral Requests Only: Each of the following items must be c	oufirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around deconstruction.	production equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human hea	Ith, the environment, or groundwater.
which may endanger public health or the environment. The acceptiability should their operations have failed to adequately investig:	e certain release notifications and perform corrective actions for releases tance of a C-141 report by the OCD does not relieve the operator of ate and remediate contamination that pose a threat to groundwater.
responsibility for compliance with any other federal, state, or loca	
Printed Name: Bruce Br Ker-	Dacceptance of a C-141 report does not relieve the operator of laws and/or regulations.  Title:Environmental Tech. 5R
Printed Name: Bruce Br Ker  Signature: Bruce Baker	laws and/or regulations.
Printed Name: Bruce Br Ker-	laws and/or regulations.  Title: Environmental Tech. 5R
Printed Name: Bruce Br Ker  Signature: Bruce Baker	laws and/or regulations.  Title: Environmental Tech. 5R  Date: 12-14-18
responsibility for compliance with any other federal, state, or local Printed Name: Bruce Brice	Title: Environmental Tech. 5R  Date: 12-14-18
Printed Name: Bruce Brker  Signature: Bruce Baker  email: larry, baker @ apachecorp.com	laws and/or regulations.     Title:
responsibility for compliance with any other federal, state, or local Printed Name:Bruce Br Ker- Signature:Bruce Br Ker- email:larry, backer @ apachecorp.com  OCD Only  Received by:Robert Hamlet	Title: Environmental Tech. 5R  Date: 12-14-18  Telephone: 432-631-6992  Date: 5/10/2019  f Approval Denied Deferral Approved
responsibility for compliance with any other federal, state, or local Printed Name:Bruce Br Ker- Signature:Bruce Br Ker- email:larry, backer @ apachecorp.com  OCD Only  Received by:Robert Hamlet	laws and/or regulations.     Title:

### State of New Mexico Oil Conservation Division

C. (4)	
Incident ID	
District RP	
Facility ID	
Application ID	

### Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.			
A scaled site and sampling diagram as described in 19.15.29.11 NMAC			
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)			
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)			
Description of remediation activities			
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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.			
Printed Name: Bruce Baker	Title: Environmental Tech.		
Signature: Bruck Bakey	Date: 9-13-19		
Printed Name: Bruce Baker Title: Environmental Tech.  Signature: Bruce Baker Date: 9-13-19  email: Larry. baker Dapachecop.com Telephone: 432-631-6982			
0			
OCD Only			
Received by:	Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by:	Date:		
Printed Name:	Title:		

Bottom Samples

Cedar Lake 737H Final Bottom Samples

					Ceds	1 Lake 737	Cedar Lake 737H Final Bottom Samples	m Samples				
0000	Don'th	č	Bonzono	Tolitone	etnyibenz	Yylanac	Total RTEY	0	Cac	CAT DRO	Date	205
BEC 1	1,	75.	אט טצט ט	OSO OSO	-0 USU	Aylenes	008 B1EA	940 0100	17 g	210 0	5/31/2019	37 8533577 -103 9047480
בונים ביים	1 51	20,	0000	0000	70.050 70.050	0.150	00:00	710.0	710.0	710.0	5/11/2010	001310111111111111111111111111111111111
BFC 2	-	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	328538201 -103 9042944
BFC 3	1-1	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.853773 -103.9043368
BFC 4	2,	16	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	13.4	<10.0	5/31/2019	32.8537196 -103.9043412
BFC 5	2,	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8536573 -103.9043720
BFC 6	,4	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8535832 -103.9044351
BFC 7	.4	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8535218 -103.9043566
BFC 8	4,	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	24.5	<10.0	5/31/2019	32.8534965 -103.9042644
BFC 8	.,9	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	652	137	6/11/5019	Pad
BFC 9	9	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	108	27	6/11/2019	n/a
BFC 10	9	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/11/2019	n/a
BFC 11	9	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/11/2019	n/a
BFC 12	9	208	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/11/5019	n/a
BFC 13	9	112	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.2	<10.0	6/11/2019	n/a
BFC 14	.9	1010	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	185	36.9	6/11/5019	n/a
BFC 15	9	2240	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/11/2019	n/a
BFC 16	9	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1120	257	6/11/5019	n/a
BFC 16	1,		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/19/2019	n/a
BFC 17	9	752	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	724	191	6/11/5019	n/a
BFC 18	9	736	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	52.5	<10.0	6/11/2019	n/a
BFC 19	9	1760	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	152	92	6/11/5019	n/a
BFC 20	9	272	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	52	<10.0	6/11/2019	n/a
BFC 21	9	4960	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	2480	698	6/11/5019	n/a
BFC 21	1,		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/19/2019	n/a
BFC 22	9	3440	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	115	50.8	6/11/2019	n/a
BFC 23	9	64	<0.050	<0.050	0.168	0.603	0.771	19.3	1400	260	6/11/5019	n/a
BFC 23	1,		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/19/2019	n/a
BFC 24	.9	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	43	<10.0	6/11/2019	n/a
BFC 25	9	32	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	513	103	6/11/2019	n/a
BFC 26	9	96	<0.050	<0.050	<0.050	<0.150	<0.300	51	16,400	4520	6/11/5019	n/a
BFC 26	1,		<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/19/2019	n/a
BFC 27	Surface	10,000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1190	248	7/16/2019	n/a
B27	3"	2,880	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	7/22/2019	n/a
B28	Surface	22000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	3190	996		n/a
B28	3"	3000	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	7/22/2019	n/a
B29	Surface	15400	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	775	406	7/16/2019	n/a



Cedar Lake 737H Final Wall Samples

				Ethylbenz	Total	Total					
Comp Pt.	CI-	Benzene	Toluene	ene	Xylenes	ВТЕХ	GRO	DRO	EXT. DRO	Date	GPS
WC 1 @ 1'	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8538370 -103.9042812
WC 2@2'	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8537787 -103.9043601
WC 3 @ 2'	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8536832 -103.9044002
WC 4 @ 4'	08	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	5/31/2019 32.8535601 -103.9044190
WC 5 @ 4'	160	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	5/31/2019 32.8534945 -103.9043439
WC 6 @ 4'	128	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	10.8	<10.0	5/31/2019	32.8534980 -103.9043134
WC 7 @ 4'	80	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8535168 -103.9043130
WC 8 @ 4'	08	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	5/31/2019 32.8535827 -103.9043221
WC 9 @ 2'	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	5/31/2019 32.8537193 -103.9043338
WC 10 @ 1'	432	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	5/31/2019 32.8537987 -103.9043187
WC 11 @ 1'	64	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	5/31/2019	32.8538669 -103.9042265
WC 12	008	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/13/2019	n/a
WC 13	2200	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/13/2019	n/a
WC 14	926	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	63.7	15.1	6/13/2019	n/a
WC 15	176	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	114	45.5	6/13/2019	n/a
WC 16	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/13/2019	n/a
WC 17	1180	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/13/2019	n/a
WC 18	7120	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	84.6	41.8	6/13/2019	n/a
WC 19	08	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	6/13/2019	n/a



June 06, 2019

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CEDAR LAKE FED CA 737H

Enclosed are the results of analyses for samples received by the laboratory on 05/31/19 16:30.

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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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.

Celeg L. Keine

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,

Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Sampling Date:

05/31/2019

Reported:

06/06/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition: Sample Received By: Cool & Intact Tamara Oldaker

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

### Sample ID: BFC # 1 @ 1' (H901924-01)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	1.81	90.6	2.00	18.1	
Toluene*	<0.050	0.050	06/06/2019	ND	2.00	99.9	2.00	15.4	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.00	100	2.00	22.3	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.08	101	6.00	8.72	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73,3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	17.8	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	85.8	% 41-142	?						
Surrogate: I-Chlorooctadecane	90.4	% 37.6-14	17						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's exclusive nemedy for any claim ansing, whether based in contract or tort, shall be familed to the amount paid by cleent for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed waved unless made in whing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be fiable for incidental or consequential damages, including, without amission, business interruptions, loss of use, or loss of use, o

Colog Latrana



APACHE CORP - HOBBS **BRUCE BAKER** 2350 W. MARLAND BLVD. **HOBBS NM, 88240** 

Fax To:

(575) 393-2432

Applicant Division

Received:

05/31/2019

Sampling Date:

05/31/2019

Reported:

06/06/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sample Received By:

Tamara Oldaker

### Sample ID: BFC # 2 @ 1' (H901924-02)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	1.81	90.6	2.00	18.1	
Toluene*	<0.050	0.050	06/06/2019	ND	2.00	99.9	2.00	15.4	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.00	100	2.00	22.3	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.08	101	6.00	8.72	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	103	% 73.3-12	9						
Chloride, SM4500CI-8	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	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6,72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	91.7	% 41-142	?						
Surrogate: 1-Chlorooctadecane	92.8	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's eviduouve remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleant for analysiss. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in whiting and interved by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiance, affiliates or successors among out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Colory i Areano



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Sampling Date:

05/31/2019

Reported:

06/06/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location:

NONE GIVEN

Sample Received By:

Tamara Oldaker

Sample ID: BFC # 3 @ 1' (H901924-03)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B\$	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	1.81	90.6	2.00	18.1	
Toluene*	<0.050	0.050	06/06/2019	ND	2.00	99.9	2.00	15.4	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.00	100	2.00	22.3	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.08	101	6.00	8.72	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73.3-12	9						
Chloride, SM4500CI-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	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	89.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	88.6	% 37.6-14	17						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damuges. Cardonal's bablisty and client's evidualive remedy for any glaim ansing, whether based in contract or ton, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderical or consequencial damages, including, without limitation, business interruptions, toss of use, or loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 a copt; in full with written approval of Cardinal Laboratories.

Cologi tions



**APACHE CORP - HOBBS BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sampling Date:

05/31/2019

Soil

Sampling Type: Sampling Condition:

Cool & Intact

Sample Received By: Tamara Oldaker

Sample ID: BFC # 4 @ 2' (H901924-04)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	1.81	90.6	2.00	18.1	
Toluene*	<0.050	0.050	06/06/2019	ND	2.00	99.9	2.00	15.4	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.00	100	2.00	22.3	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.08	101	6.00	8.72	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104 5	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8\$	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	13.4	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	92.3	% 41-142							
Surrogate: 1-Chlorooctadecane	98.2	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's eviduave remedy the any daim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratories.

adag i . trans



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To: (575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

### Sample ID: BFC # 5 @ 2' (H901924-05)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BŞ	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	104	% 73.3-12	9						
Chloride, SM4500CI-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	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	84.7	% 41-142	?						
Surrogate: 1-Chlorooctadecane	83.9	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Uabday and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unlies made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be habte for inoderical or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiance, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Cologi trans



APACHE CORP - HOBBS **BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

NONE GIVEN Project Number: Project Location:

NOT GIVEN

Sampling Date:

05/31/2019

Soil

Sampling Type: Sampling Condition:

Sample Received By:

Cool & Intact Tamara Oldaker

Sample ID: BFC # 6 @ 4' (H901924-06)

BTEX 8021B	mg/	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.3-12	9						
Chloride, SM4500CI-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	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: I-Chlorooctane	95.4	% 41-142	?						
Surrogate: 1-Chlorooctadecane	94.5	% 37.6-14	7						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liabidity and Damages. Cardana's fiabidity and chem's eviduave remedy for any claim ansing, whether based in contract or tort, shall be lemted to the amount paid by chem for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed warred unless made in writing and raccived by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderical or consequenced damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by cleint, its subsidiantes, affiliates or successors arising out of or related to the performance of the services herituider by Cardinal, regardless of whether such claims 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 Cardinal Laboratories.

Cologi Arean



**APACHE CORP - HOBBS BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

### Sample ID: BFC # 7 @ 4' (H901924-07)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					<u></u>
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/06/2019	ND	400	100	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	91.4	% 41-142	?						
Surrogate: 1-Chlorooctadecane	91.7	% 37.6-14	7						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whissoewer shall be deemed waved unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In this event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, listed of use, or loss of profits incurred by clerk, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 in cept in full with written approval of Cardinal Laboratones.

Colog i triend



APACHE CORP - HOBBS **BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To: (575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date: Sampling Type:

Soil

Sampling Condition:

Cool & Intact

05/31/2019

Sample Received By: Tamara Oldaker

### Sample ID: BFC # 8 @ 4' (H901924-08)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate 4-Bromofluorobenzene (PIL	102 9	6 73.3-12	9						
Chloride, SM4500CI-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	06/06/2019	ND	416	104	400	0.00	QM-07
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	24.5	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	109 9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	1169	% 37,6-14	17						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: (liabskey and Damages. Cardonal's bability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analysiss. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be fiable for inoderical or consequential damages, including, without limitation, business interruptions, loss of use, or toss of us

Colog 2 treens



APACHE CORP - HOBBS **BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

**NOT GIVEN** 

Sampling Type: Sampling Condition:

Sampling Date:

05/31/2019

Soil

NONE GIVEN

Sample Received By:

Cool & Intact Tamara Oldaker

Sample ID: WC # 1 @ 1' (H901924-09)

BTEX 8021B

mg/kg	Analyzed	By:	ms

	10131	· · ·	741-17-1						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	101	% 73.3-12	9						
Chloride, SM4500CI-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	06/06/2019	ND	416	104	400	0.00	

		-							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					

Surrogate: 1-Chlorooctane

98.0 %

41-142

Surrogate: 1-Chlorooctadecane

99.4%

37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's bability and client's evolutive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by clent for analyses. All claims, including those for nepligence and any other cause whitsoever shall be deemed werved unless made in writing and received by Cardinal within titinty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential damages, including, without smallation, business interruptions, tors of use, or loss of profits incurred by clent, its subsidiance, affiliates or successors aroung out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims shall not be reproduced except in full with written approval of Cardinal Liborationes.

Colory I . trains

Celey D. Keene, Lab Director/Quality Manager

Page 10 of 23



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

ATEV COLLE

06/06/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

Project Location:

NONE GIVEN

71.7%

37.6-147

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Tamara Oldaker

Sample ID: WC # 2 @ 1' (H901924-10)

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	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102 9	6 73.3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BŞ	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	72.1 9	6 41-142							

### Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's e-clusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and incovered by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidence or consequential damages, including, without limitation, business interruptions, toos of use, or loss of just, or l

Colog it . treens -



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Sampling Date:

05/31/2019

Reported:

06/06/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN NOT GIVEN Sample Received By:

Tamara Oldaker

Sample ID: WC # 3 @ 2' (H901924-11)

BTEX 80218	mg/kg		Analyze	Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.3-12	9						
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	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chloroactane	93.8	% 41-142	?						
Surrogate: 1-Chlorooctadecane	95.8	% 37.6-14	7.						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Lability and Damages. Cardinal's liability and clients evidualize freedy for any daim ansing, whether based in contract or tort, shall be invited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waired unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for invidential or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiants, allfaites or successors among out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Resides relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratones.

Colog interno



APACHE CORP - HOBBS

**BRUCE BAKER** 

2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Sampling Date:

05/31/2019

Reported:

06/06/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN NOT GIVEN

Sample Received By:

Tamara Oldaker

Sample ID: WC # 4 @ 4' (H901924-12)

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	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	103	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	< 10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	96.1	% 41-142	?						
Surrogate: 1-Chlorooctadecane	95.8	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liablely and Damages, Cardinal's hability and client's exclusive remedy for any claim ansing, whether based in contract or tont, shall be limited to the amount paid by chert for analyses. All claims, including bose for negligence and any other cause whatsoever shall be deemed waved unless made in wrong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderization consequenced damages, including, without limitation, business interruptions, limit of use, or loss of profits incurred by cleint, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based injusting 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 Cardinal Laborationes.

aling it trians



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

05/31/2019

Sampling Type:

184

ND

ND

92.1

200

6.72

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 5 @ 4' (H901924-13)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	

Surrogate: 1-Chlorooctane

DRO >C10-C28\*

EXT DRO >C28-C36

90.4 %

<10.0

<10.0

41-142

06/04/2019

06/04/2019

10.0

10.0

Surrogate: 1-Chlorooctadecane

91.4%

37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's labelity and clients eviduance remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and necessed by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequencial damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

Colog it time

Celey D. Keene, Lab Director/Quality Manager

Page 14 of 23



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported: Project Name: 06/06/2019

Project Number: Project Location: CEDAR LAKE FED CA 737H

NONE GIVEN

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 6 @ 4' (H901924-14)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	103	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	10.8	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	93.1	% 41-142	?						
Surrogate: 1-Chlorooctadecane	94.5	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Cardinal's liability and chent's exclusive remedy for any dam ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All daims, including those for negligence and any other cause whatsoever shall be detented wanted unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequencial 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 the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

Colony ? . treens ..



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: WC # 7 @ 4' (H901924-15)

3

mg/kg

94.3 %

96.0%

41-142

37.6-147

Analyzed By: ms

LX QVZ10	mg/ kg		Analyzo	Analyzed by, ins					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/05/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/05/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/05/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	< 0.150	0.150	06/05/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/05/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	106 9	6 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8\$	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/06/2019	ND	416	104	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					

Cardinal Laboratories

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Labdary and Damages. Cardinal's liability and cherit's eviduality for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by clent for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in whiting and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderical or consequential clamages, including, without amotion, business interruptions, loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. Thus report shall not be reproduced except in full with written approval of Cardinal Laboratones.

Colog ? trens



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 8 @ 4' (H901924-16)

BTEX 8021B	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/06/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 5	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC		<u></u>				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	91.7	% 41-142							
Surrogate: 1-Chlorooctadecane	95.4	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chert's eviclusive remady for any diam ansing, whether based in contract or tort, shall be lemited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thiny (30) days after completion of the applicable service. In no event shall Cardinal be liable for endedical or consequenceal damages, including, without familiation, business interruptions, loss of use, or loss of profits incurred by client, is subsidianted, affiliated or successors ensuing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Color trans

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD.

HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

05/31/2019

Reported:

06/06/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

85.9%

37.6-147

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 9 @ 2' (H901924-17)

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	06/06/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/06/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	1049	% 73,3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: I-Chlorooctane									

### Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Listhety and Damages. Cardyna's bablity and client's evolutive remoty for any claim arising, whether based in contract or tort, shall be lemited to the amount paid by chent for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed weived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be hable for inodential or consequencial dismages, including, without immation, business interruptions, toss of use, or loss of profits incurred by client, its aubisidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Colog " . treens -



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

Project Number:
Project Location:

NONE GIVEN

Sampling Date:

05/31/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Т

Sample Received By:

Tamara Oldaker

Sample ID: WC # 10 @ 1' (H901924-18)

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	06/06/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/06/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	< 0.150	0.150	06/06/2019	ND	6.27	104	6.00	0.655	
Total BTEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	104	% 73.3-12	19						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	89.1	% 41-142	?						
Surrogate: 1-Chlorooctadecane	86.5	% 37.6-14	17						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Usbuley and Damages. Cardwal's liability and client's eviclusive remedy for any dawn arrang, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be hable for inodential or consequential damages, including, without furnition, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Colog i trans

**APACHE CORP - HOBBS BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 05/31/2019

06/06/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

05/31/2019

Sampling Type:

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 11 @ 1' (H901924-19)

BTEX 80218	mg/kg		Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/06/2019	ND	2.18	109	2.00	0.974	
Toluene*	<0.050	0.050	06/06/2019	ND	2.20	110	2.00	1.07	
Ethylbenzene*	<0.050	0.050	06/06/2019	ND	2.07	103	2.00	0.104	
Total Xylenes*	<0.150	0.150	06/06/2019	ND	6.27	104	6.00	0.655	
Total 8TEX	<0.300	0.300	06/06/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/06/2019	ND	416	104	400	0.00	
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	06/04/2019	ND	220	110	200	2.27	
DRO >C10-C28*	<10.0	10.0	06/04/2019	ND	184	92.1	200	6.72	
EXT DRO >C28-C36	<10.0	10.0	06/04/2019	ND					
Surrogate: 1-Chlorooctane	90.1	% 41-142	?						
Surrogate: 1-Chlorooctadecane	88.1	% 37.6-14	7						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's hability and client's exclusive remedy for any claim analing, whether based in contract or tont, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other clause whatsoever shall be deemed waved unless made in whom and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laborationes.

Cologi tions

Celey D. Keene, Lab Director/Quality Manager

Page 20 of 23



### **Notes and Definitions**

QR-04 The RPD for the 8\$/BSD was outside of historical limits.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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.

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

Cardinal Laboratories \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's exclusive remedy for any diam analog, whether based in contract or tort, shall be limited to the amount paid by chent for analyses. All claims, including those for negligence and any other cause whitesoever shall be determed waived unless made in whiting and received by Cardinal within thirty [30] days after completion of the applicable service. In no event shall Cardinal be liable for inodernal or consequential damages, including, without family those of use, or limit of profits incurred by client, its subsidiaries, affiliates or successors arong out of or related to the performance of the services heritunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

Citiz Latina



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Cran/ Results	ion CHECKED BY: (Initials)	Sample Condition Cool Intact Cool Intact Tes Pres	Delivered By: (Circle One) Sampler - UPS - Bus - Other:
		Time:	7
		Date: Received By:	Relinquished By:
	Make REMARKS:	8	yall
esult: ☐ Yes ☐ No Add'l Phone #:  Ilt: ☐ Yes ☐ No Add'l Fax #:	Phone Result:	81/8-15	Relinquished By:
ilines.	without krnitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiene audinal, repardless of whether such claim is besed upon any of the above stated reasons or otherwise.	service. In no event shall Cardinal be liable for incidental or consequental damages, including without knitation, business interruptions, boss of use, or loss of profits incurred by client, its substitaines affiliable or successors white out of purewhead to the particular expension or otherwise.	service. In no event shall Cardinal be table for incidental or a efficiency or successors arising out of pureleted to the partiers
or the profession	or tort, shall be imited to the amount paid by the client to I received by Cardinal within 30 days after completion of I	PLEASE NOTE: Lability and Danniges. Cardina's lability and clarifs exclusive remedy for any claim arting whether based in contract or lort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatspeers shall be deemed walved unless made in writing and received by Cardinal within 30 days shar completion of the applicable	PLEASE NOTE: Liability and Damages, Cardinal's liab analyses, All claims including those for negligence and
			10 000, 2, 00
	1 ( \$3. )6		1 20 6
	11.2¢		ST.
	1 2:/2	04'	7 BLC #7
	1 /2:/0	8 4' C 1	h 1
	1 /2:08	(D) (C)	-
	12:06	(C)	l .
	1 / /2:04	-	
7.	1 ( /2:62	Ø 1' C 1	NRFC #44
Z,	1 5/31 12:00	8 -	[ / SF(#[_
Cl Bh	ACID/E OTHER OTHER DATE	# CON GROU	461924
TA	BASE:	Sample I.D.  B OR (C) TAINER NDWATE EWATE	Lab I.D. Sami
	_ = =	ER	
	PRESERV SAMPLING	MATRIX	FOR LAB USE ONLY
	Fax #:		Sampler Name: \rd (Muscu
	Phone #:	Leuker Fred CAR 737 H	Project Location: / Aplan
	State: Zip:		Project Name:
	City:	Project Owner:	Project #:
	Address:		Phone #:
	Attn:	State: (), ((, Zip: \$004)	city: Kabbs
	Company:		Address:
	P.O. #:		Project Manager: المكربيري بكيراسير
ANALYSIS REQUEST	BILL TO		Company Name:



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Apparla Project Manager: Bruce Rafte  Address: City: Holobs Phone #: Project #: Project Name: Project Location: Celek Calex Sampler Name: OGO Cheekeel	State: ALL Zip: 880 Fax #: Project Owner: Project Owner:	P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Preserv Sampling	-eu	
	dca	#		
FOR LAB USE ONLY	R		-01	
Lab I.D. Sample I.D.	(G)RAB OR (C)ON # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICEYCOOL OTHER:	TIME	BTEX
12/16/19		1 5/3/	2:22	
13 wes as	//		9:24 \	
7 00 9 Ja pl	7		9:24	/
	2' 11		2:29	
10 800 01	9.		% % % //	1/
18 0000			Q: 3"	
19 60011 01	1 -		2:36	
P.E.A.9E NOTE: Liability and Derrugues. Cardinal's liability analyses. All claims including those for negligence and any service. In ne event shall Cardinal be liable for incidental or services.	PLEASE NOTE: Liability and Damagns. Cardinal's lability and clean's archaive remedy for any claim arcing whether based in contract or lot, shall be limited to the amount paid by the clearl for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cerdinal within 12 days after compelsion of the applicable service, in no event shall Cerdinal be labely for incidental or consequental damagns, including without finalism, butainest interruptions, best of use, or less of profits incurred by client, its subsidiaries.	act or tort, shall be limited to the emount pa and received by Cerdinal within 30 days and rs, loss of use, or loss of profits incurred by inn a beased user any of the above stated is	ad by the clerk for the er completion of the applicable client, its subsidiories.	
Relinquished By:	Date: Received By:  S-31-19 Received By:  Time: 30 Author Control By:  Received By:	Makes	iii 	Yes
	Time:	١	Enail	Results

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

4.30

Sample Condition
Cool Intact
Pes Pres
No No

4

CHECKED BY: (Initials)



June 17, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CEDAR LAKE FED CA 737H

Enclosed are the results of analyses for samples received by the laboratory on 06/11/19 16:10.

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accredited 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.

Celeg L. Keene

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,

Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Sampling Date:

06/11/2019

Reported:

06/17/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Sample Received By:

Tamara Oldaker

Project Location:

NOT GIVEN

Sample ID: BFC # 1 @ 1.6" (H902025-01)

BTEX 8021B	mg/	'kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103	% 73.3-12	9						
Chloride, SM4500CI-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	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	103	% 41-142	?						
Surrogate: 1-Chlorooctadecane	105	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Ulabelry and Damages. Cardinal's labelity 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, including those for negligence and any other climite whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, michading, without amtation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiance, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

College trena



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Tamara Oldaker

Sample ID: BFC # 8 (H902025-02)

BTEX 8021B	mg/	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	106 9	6 73.3-12	9						
Chloride, SM4500CI-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	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	759	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	137	10.0	06/12/2019	ND					
Surrogate; 1-Chlorooctane	100 9	6 41-142	!						
Surrogate: 1-Chlorooctadecane	128 9	6 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE MOTE: Liability and Damages. Cardwars hability and chent's eviduative remady for any claim amang, whether based in contract or tord, shall be limited to the amount paid by cleint for analyses. All claims, including those for inepligence and any other cause whitsoever shall be detented warved unless made in writing and received by Cardmal within thirty (30) days after completion of the applicable service. In no event shall Cardmal be liable for inoderital or consequential damages, including, without amisterion, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardmal, regardless of whether such claims 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 Cardmal Laborationes.

Colony Z Kinne

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 24



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 06/11/2019

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 9 (H902025-03)

BTEX 8021B	mg/	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	102	% 73.3-12	9						
Chloride, SM4500CI-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	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	108	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	27.0	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	93.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	101	6 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Uabday and Damages. Cardwal's labbitly and clerit's exclusive remedy for any darm ensuring, whether based in contract or tons, shall be lemted to the amount paid by clerit for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed wanted unless made in whom and received by Cardwal within thirty (30) days after completion of the applicable service. In no event shall cardwal be bable for inoderical or consequential damages, including, without lemtetoon, business interruptions, loss of use, or loss of profits incurred by clerk, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardwal, regardless of whether such claims 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 Cardwal Laborationes.

Colog 2 trees



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

201

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

# Sample ID: BFC # 10 (H902025-04)

BTEX 80218	mg/	/kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate 4-Bromofluorobenzene (PIC	102	% 73.3-12	19						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	98.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	100	% 37.6-14	17						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chert's exclusive remidy for any claim ansing, whether based in contract or tons, shall be limited to the amount paid by clent for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed wanted unless made in writing and received by Cardinal within thirty (3d) days after completion of the applicable service. In no event shall Cardinal be fiable for encodential or consequential damages, including, without jumitation, business interruptions, loss of use, or loss of just, or loss of use, or loss of profits incurred by clerk, its subsidianes, affliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratomes.

Cologia tieno

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 24



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

90.4%

91.7%

41-142

37.6-147

Sampling Date:

06/11/2019

Sampling Type: Sampling Condition: Soil

Sample Received By:

Cool & Intact Tamara Oldaker

Sample ID: BFC # 11 (H902025-05)

BTEX 80218	mg/	'kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	103 5	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					

### Cardinal Laboratories

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Liabetry and Damages. Cardinal's Sabirity and clients exclusive remedy for any claim arising, whisther based in contract or tort, shall be jimited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitesoever shall be deemed wereal unless made in writing and received by Cardinal within thinty [30] days after completion of the applicable service. In no event shall Cardinal be liable for moderical or consequential damages, including, without jimitedon, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors ansing out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

Colog 2. trans-

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 24



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Analyzed By: BF

Received:

06/11/2019

Sampling Date:

06/11/2019

Reported:

BTEX 8021B

06/17/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

mg/kg

97.2 %

99.5 %

41-142

37.6-147

Sample Received By:

Tamara Oldaker

Project Location:

NOT GIVEN

Sample ID: BFC # 12 (H902025-06)

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total 8TEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	103 9	6 73.3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	06/13/2019	ND	384	96.0	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.811	
DRO >C10-C28*	<10.0	10.0	06/12/2019	ND	186	93.2	200	1.81	
EXT DRO >C28-C36	< 10.0	10.0	06/12/2019	ND					

Cardinal Laboratories

Surrogate: 1-Chlorooctane

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Liablety and Damages. Cardinal's liablety and client's evolutive rainedy for any claims ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived whiss made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall cardinal be labble for inoderical or consequential damages, methods imitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors among out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples derivined above. This report shall not be reproduced encept in full with written approval of Cardinal abovestones.

Cologic trans-

Celey D. Keene, Lab Director/Quality Manager

Page 7 of 24



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 13 (H902025-07)

BTEX 8021B	mg,	/kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	1.94	97.2	2.00	1.12	
Toluene*	<0.050	0.050	06/14/2019	ND	1.91	95.7	2.00	0.282	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	1.86	92.8	2.00	1.71	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	5.67	94.5	6.00	0.151	
Total BTEX	<0.300	0.300	06/14/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	Analyzed By: AC		_			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/13/2019	ND	400	100	400	0.00	QR-03
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	06/13/2019	ND	226	113	200	2.62	
DRO >C10-C28*	12.2	10.0	06/13/2019	ND	197	98.6	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	91.5	% 41-142	?						
Surrogate: 1-Chlorooctadecane	96.6	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liablety and Damages. Cardwal's lability and client's eviduative remody for any disimiliance, and client's eviduative remody for any disimiliance, and any other cause whatsoever shall be lambed to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in whiting and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinals be liable for inoderical or consequential damages, including, without limitation, business interruptions, limit of use, or loss of profits incurred by client, its subsidiants, affiliates or successors among out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratories.

Colog 2 trans



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By: Tamara Oldaker

Sample ID: BFC # 14 (H902025-08)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/14/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/14/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/14/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/14/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/14/2019	ND			7		
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8S	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2019	ND	226	113	200	2.62	
DRO >C10-C28*	581	10.0	06/13/2019	ND	197	98.6	200	2.45	
EXT DRO >C28-C36	36.9	10.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	94.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	108	% 37.6-14	17						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Lubbley and Damages. Cardinal's bability and chent's exclusive remody for any daim ansing, whether based in contract or tont, shall be limited to the amount paid by chent for analyses. All claims, including those for negligence and any other cause whatsoever shall be idented waived unless made in writing and received by Cardinal within thirty [30] days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of use, or loss of profits incurred by givent, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such diam's based upon any of the above stated nations or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laborationes.

College triens



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 06/11/2019

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: BFC # 15 (H902025-09)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	105	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	06/13/2019	ND	400	100	400	0.00	
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	06/13/2019	ND	226	113	200	2.62	
DRO >C10-C28*	<10.0	10.0	06/13/2019	ND	197	98.6	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	91.0	% 41-142	?						
Surrogate: 1-Chlorooctadecane	92.6	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages, Cardinal's Rability and client's exclusive remedy for any claim arising, whether based in contract or cort, shall be immed to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service, In no event shall Cardinal be liable for inoderital or consequential damages, including, without limitation, business interruptions, loss of use, or limit of profits incurred by client, its subpidianes, affiliates or successors among out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laborationes.

Colony i . trans

APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

### Sample ID: BFC # 16 (H902025-10)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	rkg	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	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	1120	10.0	06/12/2019	ND	185	92.6	200	8.38	QM-07
EXT DRO >C28-C36	257	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	90.7	% 41-142	?						
Surrogate: 1-Chlorooctadecane	143 9	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabetry and Chamages, Cardinal's bablisty and chent's eviluative remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderical or consequential damages, including, without limitation, business interruptions, toss of use, or loss of us

Colony L. trains



**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 17 (H902025-11)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103	% 73 3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	724	10.0	06/12/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	191	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	89.1	% 41-142	?						
Surrogate: 1-Chlorooctadecane	126	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cerdinal's flability and chent's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by clerit for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in wrong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential duringes, including, without imvalve, imvalved, imvalved, imvalved, imvalved, including those of use, or loss of use, or loss of use, or loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratories.

Color Lations



**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

**CEDAR LAKE FED CA 737H** 

Project Number: Project Location:

NONE GIVEN **NOT GIVEN** 

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

# Sample ID: BFC # 18 (H902025-12)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B\$	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	06/13/2019	ND	400	100	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	52.5	10.0	06/12/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	84.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	90.6	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's babliny and client's exclusive remedy for any daim ansing, whether based in contract or tort, shall be limited to the amount plaid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits inciminal or consequential damages, and the performance of the services hereunder by Cardinal 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 Cardinal Laboratories.

Colony 2 . trans



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 19 (H902025-13)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	< 0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102 5	% 73,3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	06/13/2019	ND	400	100	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	152	10.0	06/12/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	92.0	10.0	06/12/2019	ND					
Surrogate: I-Chlorooctane	92.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	102	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabetry and Damages. Cardinal's bability and client's exclusive remaily for any darm ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be ideemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodertaal or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of use, or loss of use, or loss of profits incurred by client, its authorities or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

Colog V. trans



**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Sampling Date: Sampling Type: 06/11/2019

Reported:

06/17/2019

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sample Received By:

Tamara Oldaker

# Sample ID: BFC # 20 (H902025-14)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	< 0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate 4-Bromofluorobenzene (PIL	107	% 73,3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	06/13/2019	ND	400	100	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	52.0	10.0	06/12/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	<10.0	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	94.4	% 41-142	?						
Surrogate: 1-Chlorooctadecane	103	% 37.6-14	7						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whiteher based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatesoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequencial damages, including, without limitation, business interruptions, lists of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arising out of or related to the performance of the services hermunder by Cardinal, 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 Cardinal Laborationes.

Colory I treens



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 21 (H902025-15)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102	% 73 3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4960	16.0	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	2480	10.0	06/12/2019	ND	185	92.6	200	8,38	
EXT DRO >C28-C36	869	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	90.8	% 41-142	?						
Surrogate: 1-Chlorooctadecane	188	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liablety and Damages. Cardena's hability and chent's exclusive remedy for any claim ansing, whether based in contract or tort, shall be larried to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed wanted unless made in writing and received by Cardenal within thirty [30] days after completion of the applicable service. In no event shall Cardenal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incident by client, its subsidiaries, affiliates or successors animing out of or related to the performance of the services hereunder by Cardenal, 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 Cardenal Laborationes.

Color i tream

APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Sampling Date:

06/11/2019

Reported:

06/17/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number:

NONE GIVEN

Project Location: NOT GIVEN

Sample Received By:

Tamara Oldaker

# Sample ID: BFC # 22 (H902025-16)

BTEX 8021B	mg/	kg	Anaiyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0,050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	105	73.3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC			_		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3440	16.0	06/13/2019	ND	400	100	400	0.00	
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	06/12/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	115	10.0	06/12/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	50.8	10.0	06/12/2019	ND					
Surrogate: 1-Chlorooctane	97.5	% 41-142	•						
Surrogate: 1-Chlorooctadecane	105	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's bability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed warned unless made in writing and received by Cardinal within thiny (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential damages, including, without lamitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples dentified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Colog 2 trans



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

161%

37.6-147

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 23 (H902025-17)

sult 050 050 050 .68 603	Reporting Limit 0.050 0.050 0.050 0.150	Analyzed 06/15/2019 06/15/2019 06/15/2019	Method Blank ND ND ND	BS 2.37 2.38	% Recovery 119 119	True Value QC 2.00 2.00	RPD 2.69	Qualifier
050 1 <b>68</b> 6 <b>03</b>	0.050 0.050	06/15/2019 06/15/2019	ND				2.69	
.68 i03	0.050	06/15/2019		2.38	119	2.00		
i03			ND			2.00	1.04	
	0.150		140	2.22	111	2.00	2.28	
71		06/15/2019	ND	6.66	111	6.00	1.85	
	0.300	06/15/2019	ND					
119 %	5 73.3-12	9						
mg/i	(g	Analyze	d By: AC					
sult	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
.0	16.0	06/13/2019	ND	400	100	400	0.00	
mg/l	(g	Analyze	d By: MS					S-04
sult	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
.3	10.0	06/13/2019	ND	194	96.8	200	0.317	
00	10.0	06/13/2019	ND	185	92.6	200	8.38	
50	10.0	06/13/2019	ND					
	mg/l mg/l	16.0 mg/kg  Sult Reporting Limit  1.3 10.0 mg/kg	sult Reporting Limit Analyzed  1.0 16.0 06/13/2019  1.0 16.0 06/13/2019  1.0 16.0 06/13/2019  1.0 06/13/2019  1.0 06/13/2019	Reporting Limit   Analyzed   Method Blank	Reporting Limit   Analyzed   Method Blank   BS	Reporting Limit   Analyzed   Method Blank   BS   % Recovery	Reporting Limit   Analyzed   Method Blank   BS   % Recovery   True Value QC	Sult         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC         RPD           J.0         16.0         06/13/2019         ND         400         100         400         0.00           mg/kg         Analyzed By: MS           Sult         Reporting Limit         Analyzed         Method Blank         BS         % Recovery         True Value QC         RPD           J.3         10.0         06/13/2019         ND         194         96.8         200         0.317           100         10.0         06/13/2019         ND         185         92.6         200         8.38

### Cardinal Laboratories

Surrogate: 1-Chlorooctadecane

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and chent's evolutive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All claims, including those for negligence and any other fasse whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be hable for inoderical or consequential damages, including, without invision, business interruptions, loss of use, or loss of use, or loss of use, or loss of grafts incurred by chent, as subsidiantes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

Colog Lations



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 24 (H902025-18)

BTEX 80218	mg,	/kg	Analyze	d By: ms					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73.3-12	9						
Chloride, SM4500CI-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	06/13/2019	ND	400	100	400	0.00	
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	06/13/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	43.0	10.0	06/13/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	<10.0	10.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	101	% 41-142	?						
Surrogate: 1-Chlorooctadecane	106	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Labelity and Damages. Cardinal's labelity and clients eviclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analysies. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodential or consequential durages, including, without imstation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors arong out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

Colog i trans



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NOT GIVEN

NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

# Sample ID: BFC # 25 (H902025-19)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	103	% 73.3-12	9						
Chloride, SM4500CI-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	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Anaiyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/13/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	513	10.0	06/13/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	103	10.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	104 :	% 41-142	•						
Surrogate: 1-Chlorooctadecane	126	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabdary and Damages. Cardinal's liabdary and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be imited to the amount paid by client for analysies. All claims, including those for negigence and any other cause whatsoever shall be deemed waived unless made in withing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential damages, uncluding, without imitation, business interruptions, loss of use, or loss of whether such claims 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 Cardinal Laboratories.

Cologie Kina



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/11/2019

Reported:

06/17/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

06/11/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 26 (H902025-20)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.37	119	2.00	2.69	
Toluene*	<0.050	0.050	06/15/2019	ND	2.38	119	2.00	1.04	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.22	111	2.00	2.28	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.66	111	6.00	1.85	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	109 9	% 73,3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/13/2019	ND	400	100	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: MS					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	51.0	50.0	06/13/2019	ND	194	96.8	200	0.317	
DRO >C10-C28*	16400	50.0	06/13/2019	ND	185	92.6	200	8.38	
EXT DRO >C28-C36	4520	50.0	06/13/2019	ND					
Surrogate: 1-Chlorooctane	524 5	% 41-142	?						
Surrogate: 1-Chlorooctadecane	1170	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Labblety and Damages. Cardwal's habblety and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitehorever shall be deermed waved unlikes made in writing and received by Cardwal within thirty (30) days after completion of the applicable service. In no event shall cardwal be habble for incidental curvages, including, without imitation, business interruptions, loss of use, or loss of profits ancurred by client, its subsidiantes, affiliates or successors analing out of or related to the performance of the services hereunder by Cardwall, regardless of whether such claims 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 Cardwall Laborationes.

along it . time

Celey D. Keene, Lab Director/Quality Manager

Page 21 of 24



### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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.
	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

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabelity and Damages. Cardinal's liabelity and cherit's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cherit for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderstal or consequenceal damages, including, without limitation, business interruptions, 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 Cardinal, 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 Cardinal Laborationes.

adagit time



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Delivered By Sampler - UPS		Relinquished By:	id as	Relinquished By	service. In no event shall affiliates or successors are	PLEASE NOTE: Liability analyses. All chiers include	Ø	2	00	7	6	Ŋ	4	W	72		Lab I.D. <i>H902.02</i>		FOR LAB USE ONLY	Sampler Name:	Project Location:	Project Name:	Project #:	Phone #:	city: Habo	Address:	Project Manager:	Company Name:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		y:	1	N. A.	service. In no event shall Cardinal be liable for Inddental or consequental damages, including without limitation, business interruptions, bots of use, or loss of profits incurred by claimt, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	PLEASE NOTE: Lability and Diamages. Cardinal's lability and client's enclusive remody for any claim arising whether based in contract or tort, shall be limited to the ajmount paid by the client tor the amplicable analyses. All claims including those for negligence and any other cause whatever shall be deemed waived inless made in writing and received by Cardinal within 10 days after completion of the applicable	BECE 16	BECKENIS	BFC #14	BECH 12	134176	BELAII		RF1 #9	BFC #	8501016"	Sample I.D.				n: frostor lide,			_			2 300 5	" Free Rouche
2.1c	Time:	_1	Time	Date: 11-19	equental damages, including v	lent's exclusive remody for an cause whatboever shall be do											.D.			,	Take SedOA		Project Owner:	Fax #:	State: NM		2	(e
Sams Coor Coor		Received By		Received By:	without limitation, busin rdinal, regardless of w	y ctaim erising whether semed waived unless r		-	( /	$C_{i}$	( /	- 5	C /	( /	3	0 1	(G)RAB OR ( # CONTAINE GROUNDWA WASTEWAT	RS			9 47374				Zip: 88240	:		
Sample Condition Cool Intact Pes Pes No No		in many	man !!	:	ness interruptions, loss thether such claim is be	r based in contract or to made in writing and rec	-	/		_	~	,	,		_		SOIL OIL SLUDGE OTHER:		MATRIX	F <sub>2</sub>		St	Ω	A		Ω.	۵.	
CHECKED BY: (Initials)	(	A ABOVINA		/ /	of use, or loss of profits sed upon any of the ab	or, shall be limited to the		/	~	~	-	-	-	~		-	ACID/BASE: ICE / COOL OTHER :		PRESERV.	Fax #:	Phone #:	State: Zip:	City:	Address:	Attn:	Company:	P.O. #:	BILL
) BY:			REMARKS:	Phone Result:	incurred by client, its si ove stated reasons or o	<ul> <li>âmount paid by the cf</li> <li>30 days after complete</li> </ul>	2:38,2	2:3/0	2:39	2:3	2.30	2:2	2:2	2:242	2:22:2	1H 9:50Am	DATE TIME		SAMPLING			B						BILL TO
				Phone Result:	bsidiaries. Nerwise.	and for the n of the applicable	\$2 ^	_ Ø,	101	320 (	300, 1	1801	- C	12/		4.	Cl					<u></u>	<u> </u>					
				Yes O			// //		( ) /		1 1	^ ~		1	/	)   )	EXT.	TPH Y	<u> </u>									
				No Add'l Phone #:  No Add'l Fax #:																						_		ANALYSIS RE
																								7-1877 P-18		-		REQUEST
																								•				



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Houling		BILL TO	ANALYSIS REQUEST
Project Manager: De AP Ricon	P.O. #:		
Address:	Company:	y:	
City: Hobby State/IM Zip: 88946		-	
Phone #: Fax #:	Address:		
Project #: Project Owner:	City:		
Project Name:	State:	Zip:	
Project Location: Color lake Que CA #737 H	Phone #:		
Desur	Fax #:		
FOR LAB USE ONLY	MATRIX PRESERV.	ERV. SAMPLING	
RS			171;
Sample I.D.	STEWATI L DGE HER: D/BASE:	ER:	I TEY
- #	- S	-	
12 BFC#18	, ,	1 2:42	
13 RFC \$ 19		2:44	
14 856 #30	/	2:46	
15 BPC #21 C 1		2148	
16 BFC #22		1 2250	
17 BFC #23 C1		/ 2:52	
18 BC(#24)	^	( 2:5×	
19 BEC #25	1	1 2:56	
W BFC #24 C1		2:58	
PLEASE NOTE: Liability and Dambgies. Candinal's liability and client's exclusive remady for any cliam arising whether based in contract or tork, shall be limited to the ameling paid by the client for the applicable analyses. All cliams including those for negligence and any other cause whethosever shall be deemed welved unless made in writing and received by Cardinal within 30 days after completion of the applicable	whether based in contract or tort, shall be I unless made in writing and received by Can	imited to the emount paid by the client dinal within 30 days after completion (	for the sopicable
service. In no event shall Cardinal be fable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, efficies or successors ariging out of or related to the performance of services have under by Cardinal, requirities of whether such client is based upon any of the above stated reasons or otherwise.	n, business interruptions, loss of use, or los us of whether such claim is based upon an	se of profits incurred by client, its subsi y of the above stated reasons or other	
Received By:	p By:	Phone Result:	ut: □ Yes □ No  Add'I Phone #:
Time:,	himara Illa		

Relinquished By:

Date: Pare 11.19

Reserved By:

Time:

Sampler - UPS - Bus - Other: Delivered By: (Circle One)

Sample Condition
Cool Intact
Gres Gres
No No

40 CHECKED BY: (Initials)



June 20, 2019

JEFFREY BROOM

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CEDAR LAKE FED CA 737H

Enclosed are the results of analyses for samples received by the laboratory on 06/13/19 10:10.

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 <a href="https://www.tceq.texas.gov/field/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

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.

Celeg Li Keene

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,

Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Sampling Date:

06/13/2019

Reported:

06/20/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location:

NONE GIVEN

Sample Received By:

Tamara Oldaker

Sample ID: WC # 12 (H902055-01)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/15/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	102	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	06/17/2019	ND	416	104	400	3.92	
TPH 8015M	mg/	'kg	Analyze	d By: M\$					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	<10.0	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	82.2	% 41-142	?						
Surrogate: 1-Chlorooctadecane	81.9	% 37.6-14	17						

### Cardinal Laboratories

\*=Accredited Analyte

PLESE NOTE: Liability and Damages. Cardinal's liability and client is evilusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after compression of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without imitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services heritative by Cardinal, regardless of whitether such claims 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 Cardinal Laboratones.

align treasure



**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Reported: Project Name: 06/20/2019 CEDAR LAKE FED CA 737H

Project Number: Project Location: **NONE GIVEN** 

**NOT GIVEN** 

Sampling Date:

06/13/2019

Soil

Sampling Type: Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: WC # 13 (H902055-02)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/15/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	103	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method 8lank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	06/17/2019	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	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	<10.0	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	87.6	% 41-142	?						
Surrogate: 1-Chlorooctadecane	90.2	% 37.6-14	17						

# **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liablety and Damages. Cardinal's liablety and cherit's endusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by cleint for analyses. All dains, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without jimitabon, business interruptions, loss of use, or loss of profits incurred by clernt, its subsidianes, affiliates or successors arising out of or ralated to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

Colog 2 trans

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 11



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Reported:

06/20/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

Project Location:

NONE GIVEN

Sampling Date:

06/13/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

# Sample ID: WC # 14 (H902055-03)

BTEX 80218	mg,	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/15/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/15/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/15/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/15/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/15/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	101	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	06/17/2019	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	06/14/2019	ND	185	92.3	200	3,85	
DRO >C10-C28*	63.7	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	15.1	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	95.4	% 41-142	?						
Surrogate: 1-Chlorooctadecane	102	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chent's exclusive remedy for any diam ansing, whether based in contract or tort, shall be limited to the amount paid by clent for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed warved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without immitted, without immitted, business interruptions, loss of use, or loss of profits incurred by client, os subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratomists.

Colog it . trans

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 11



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Sampling Date:

06/13/2019

Reported:

06/20/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sample Received By:

Tamara Oldaker

Sample ID: WC # 15 (H902055-04)

BTEX 8021B	mg,	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/19/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/19/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/19/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/19/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIC	106	% 73.3-12	9						
Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	06/17/2019	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	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	114	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	45.5	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	89.3	% 41-142	?						
Surrogate: 1-Chlorooctadecane	104	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's hability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be lamined to the amount paid by client for analyses. All claims, including those for negligence and any other clause whatsomer shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodental or consequencial damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 e-rept in full with written approval of Cardinal Laborationes.

Cologie , tieno

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 11



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Reported:

06/20/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

NONE GIVEN

Sampling Date:

06/13/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

Sample ID: WC # 16 (H902055-05)

BTEX 8021B	mg,	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/19/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/19/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/19/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/19/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	106	% 73.3-12	9						
Chloride, SM4500CI-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	06/17/2019	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					39
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	<10.0	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	85.0	% 41-142	?						
Surrogate: 1-Chloroactadecane	86.2	% 37.6-14	7						

# Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's bability and client's eviclusive remoty for any claim ansing, whether based in contract or tort, shall be (mitted to the amount paid by client, for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In no evint shall Cardinal be liable for encidential or contaquishool damages, including, wethout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiants, affisites or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims because the performance of the services hereunder by Cardinal, regardless of whether such claims because the performance of the services hereunder by Cardinal, regardless of whether such claims because the performance of the services hereunder by Cardinal, regardless of whether such

Cologie , trans



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 06/13/2019

06/20/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sampling Date:

06/13/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 17 (H902055-06)

BTEX 8021B	mg/	kg	Analyze	d By: ms			_		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/19/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/19/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/19/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/19/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/19/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	105	% 73,3-12	9						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1180	16.0	06/17/2019	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	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	<10.0	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	84.7	% 41-142	?						
Surrogate: 1-Chlorooctadecane	85.2	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be invised to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be determed verved unless made in writing and received by Cardinal within thinty (30) days after completion of the applicable service. In no event shall Cardinal be liable for moderizal or consequencial damages, including, without immation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

Colon I treen



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Reported:

06/20/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

**NOT GIVEN** 

NONE GIVEN

Sampling Date:

06/13/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: WC # 18 (H902055-07)

e QC RPD Qualifi 1.65 0.599 1.59 1.43
0.599 1.59
1.59
1.43
e QC RPD Qualifi
3.92
e QC RPD Qualifi
3.85
6.10

# **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's evidusive remedy for any claim arising, whether based in contract or tort, shall be lamined to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in whong and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequencial damages, including, without immation, business interruptors, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors among out of or instanct to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratones.

College treens



**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/13/2019

Sampling Date:

06/13/2019

Reported:

06/20/2019

Sampling Type:

Soil

Project Name:

CEDAR LAKE FED CA 737H

Sampling Condition:

Cool & Intact

Project Number: Project Location: NONE GIVEN **NOT GIVEN** 

Sample Received By:

Tamara Oldaker

# Sample ID: WC # 19 (H902055-08)

BTEX 80218	mg/	<sup>r</sup> kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8S	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/19/2019	ND	2.21	111	2.00	1.65	
Toluene*	<0.050	0.050	06/19/2019	ND	2.24	112	2.00	0.599	
Ethylbenzene*	<0.050	0.050	06/19/2019	ND	2.08	104	2.00	1.59	
Total Xylenes*	<0.150	0.150	06/19/2019	ND	6.26	104	6.00	1.43	
Total BTEX	<0.300	0.300	06/19/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	107	% 73 3-12	9						
Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Chloride	80.0	16.0	06/17/2019	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	Qualifie
GRO C6-C10*	<10.0	10.0	06/14/2019	ND	185	92.3	200	3.85	
DRO >C10-C28*	<10.0	10.0	06/14/2019	ND	183	91.4	200	6.10	
EXT DRO >C28-C36	<10.0	10.0	06/14/2019	ND					
Surrogate: 1-Chlorooctane	90.9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	91.8	% 37.6-14	7						

# **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's hability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be finited to the amount paid by client for analyses. All claims, including those for negligence and any other clause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderical or consequential damages, including, without emission, business interruptions, 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 Cardinal, regardless of whether such claims is based upon any of the above stated reasons are otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laborationes.

Colog Lations



### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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.

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

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's lability and chart's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by clerk for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inoderital or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by cheft, its subsidiaries, affiliates or successors arong out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laborationes.

Cologi treena



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: A Sc.		BILL TO	The state of the s	ANALYSIS REQUEST
Project Manager: Polyte Buller	John John John	P.O. #:		
Address:		Company:		
city: 1/0 bbs sta	State: [] Le Zip: << 240	Attn:		
Phone #: Fax #:	# ()	Address:		
Project #: Proj	Project Owner:	City:		
Project Name:		State: Zip:		
Project Location: Cadar laker Fe	0 CA 737 H	*		
Sampler Name: Jog, Qui sanda		Fax #:		
- 1	MATRIX	PRESERV SAMPLING		
Lab I.D. Sample I.D.	)RAB OR (C)OMP. CONTAINERS ROUNDWATER ASTEWATER DIL L UDGE		N XL TPH RTEX	
(A) # 10.	# v s	1 0 (1/2 8	/	
L	C -		о 7 7	
ひりでサンタ	<i>C</i> - (	11 ( 8.52	52 //////	
2/# 3m 6	c ~	<i>b</i> >:8	^ Z Z	
\$ wic# 16	c	- × ×	SG ///	
つ いくキバ	C -	1 ) 8:58	× Z Z	
2 い(井)8	-	i q	2/	
8 mc#19	0	1 6/13 0.02	S	
PLEASE MOTE: Liability and Deragoe. Cardina's liability and client's sectable remark for my claim uniting whether based in contract or tint, shall be limited to the amount paid by the client for the analyzers. All claims including those for negligence and any other cause whistocover shall be deemed whiter makes in writing and received by Cardinal within 30 days after competion of the applicable service, in no event shall Cardinal be liable for incidental or consequental damages, including without firstballon, business interruptions, loss of use, or loss of profits incurred by dent, its publisharies, affiliates or successors whiterward of or released to the confirmance of services hereunder by Cardinal incardings of whether such claims is based on one more of the above stated describe or ordering and the confirmance of services hereunder by Cardinal incardings of whether such claims is based on one more of the above stated describe or ordering.	We remady for any claim arising whether besed in contract between shall be deemed walved unless made in writing and mages, including without ferfolden, business interruptions, it hereunder by Candrall recordeds of whether such claim.	t or tort, shall be amixed to the amount peed by the of received by Cardinal within 30 days after comple loss of use, or loss of profits incurred by celent, its is bessed upon any of the about stated research or	client for the stone of the applicable subsidiaries.	
Relanduished By: Date	Date 3-19 Received By:	Phoi	ult: ☐ Yes ☐ No	Add'l Phone #:
1	<b>∽</b>	Soldator	S N	AGG I FAX #:
Relinquished By: Date	Received By:	(		
Time:				

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

5.00

Sample Condition
Cool Intact
Pes Tes
No No

CHECKED BY:
(Initials)



June 25, 2019

JEFFREY BROOM

**APACHE CORP - HOBBS** 

2350 W. MARLAND BLVD.

**HOBBS, NM 88240** 

RE: CEDAR LAKE FED CA 737H

Enclosed are the results of analyses for samples received by the laboratory on 06/19/19 16:40.

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 <a href="https://www.tceq.texas.qov/field/qa/lab">www.tceq.texas.qov/field/qa/lab</a> accredited 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.

Celeg L. Keine

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,

Celey D. Keene

Lab Director/Quality Manager

**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240 (575) 393-2432

Fax To:

06/19/2019

Received: Reported: 06/19/2019

Sampling Date: Sampling Type:

Soil

06/25/2019

Sampling Condition:

Cool & Intact

Project Name:

CEDAR LAKE FED CA 737H NONE GIVEN

Sample Received By:

Tamara Oldaker

Project Number: Project Location:

**NOT GIVEN** 

Sample ID: BFC # 16 (H902123-01)

BTEX 8021B	mg/	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	<0.050	0.050	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	106 %	6 73.3-12	9						
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	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	<10.0	10.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	<10.0	10.0	06/21/2019	ND					
Surrogate: 1-Chlorooctane	94.3 %	% 41-142	?						
Surrogate 1-Chlorooctadecane	95.9 9	6 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and chien's exclusive remedy for any dawn ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatoverer shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be hable for inodential or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

Colony is themas

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 7

APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. **HOBBS NM, 88240** 

Fax To:

(575) 393-2432

Received:

06/19/2019

Reported:

06/25/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

NOT GIVEN

Sampling Date:

06/19/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

### Sample ID: BFC # 26 (H902123-02)

BTEX 8021B	mg/	kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	<0.050	0.050	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	106 9	6 73.3-12	9						
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	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	< 10.0	10.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	<10.0	10.0	06/21/2019	ND					
Surrogate: 1-Chlorooctane	95.9 9	% 41-142	?						
Surrogate: 1-Chlorooctadecane	97.7	% 37.6-14	7						

### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in wrong and incovered by Cardinal within thirty (30) days after completion of the applicable senice. In no event shall cardinal be liable for inodereal or consequential damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laboratones.

College trans

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 7

APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

06/19/2019

Reported:

06/25/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location:

ımber: NONE GIVEN cation: NOT GIVEN

Sampling Date:

06/19/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

Sample ID: BFC # 23 (H902123-03)

r d

	Analy	/zed	By:	BI
--	-------	------	-----	----

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/20/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	<0.050	0.050	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	108 %	6 73.3-12	9						
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	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	<10.0	10.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	<10.0	10.0	06/21/2019	ND					

Surrogate: 1-Chlorooctane

102 %

41-142

Surrogate: 1-Chlorooctadecane

103 %

37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any client anising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for nigitigence and any other cause whitstoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for inodential or consequencial damages, including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiances, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

Colog L. trans

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 7

APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To: (575) 393-2432

Received:

06/19/2019

Reported:

06/25/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

06/19/2019

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Tamara Oldaker

### Sample ID: BFC # 21 (H902123-04)

BTEX 8021B	mg/	'kg	Analyze	d By: BF					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	06/20/2019	ND	1.78	89.2	2.00	2.66	
Toluene*	<0.050	0.050	06/20/2019	ND	1.76	87.9	2.00	2.19	
Ethylbenzene*	<0.050	0.050	06/20/2019	ND	1.70	85.1	2.00	2.34	
Total Xylenes*	<0.150	0.150	06/20/2019	ND	5.20	86.6	6.00	1.41	
Total BTEX	<0.300	0.300	06/20/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	104 5	% 73.3-12	9						
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	06/21/2019	ND	206	103	200	1.41	
DRO >C10-C28*	<10.0	10.0	06/21/2019	ND	176	88.2	200	6.16	
EXT DRO >C28-C36	<10.0	10.0	06/21/2019	ND					
Surrogate: 1-Chlorooctane	103 5	% 41-142	?						
Surrogate 1-Chlorooctadecane	103 9	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liabelity and Damages. Cardinal's liabelity and cherit's exclusive remedy for any darm ansing, whether based in contract or tort, shall be limited to the amount paid by client for analysiss. All claims, including those for negligence and any other cause whitstoever shall be detended waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequencial damages, including, without limitation, business interruptions, lists 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 Cardinal, 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 Cardinal Liaboratones.

Cologi treens -

Celey D. Keene, Lab Director/Quality Manager



### **Notes and Definitions**

QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.

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.

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

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Clamages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be hable for inodential or consequential damages, including, without limitation, business interruptions, lists of use, or loss of use analysis of use, or loss of use used to use use the use of use and use of use used to the performance of the services hereunder by Cardinal, requiring the use of use of use used to use used to use use of use use of use use of use used to use use of use used to use use of use used to use or use use of use used to use used to use used to use used to the performance of the services hereing the use of use used to use used to

Colog L. treens

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Project Manager: Address: City: Hebb	State: WW. Fax #: Project Owner	Zib: 888000	P.O. #: Company: Attn: Address: City: State: Zip:			ANALYSIS REQUEST	TSI
Project Location:	Coda lake FeelCF	H7574	*	<u> </u>			
Sampler Name:	Sac Brospola		Fax #:	t/			-
FOR LAB USE ONLY		MATRIX	PRESERV SAMPLING				
Lab I.D. H9 <i>021</i> 23	Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:		37EX		
-	3FC #16		~	139 pm 1	-		
2	BFC #24	( ) )	1 6/19	200.			
(3)	B46 # 23	C / 1	1 6/19	1/3/0 /			
t	BFL #34 QI	7	11/1/19	\$:3p. 1			
PLEASE NOTE: Liabley and analyses. All claims including sortions. In no event shall Cal	PLEASE NOTE: Liabley and Damages. Cardinat's liabley and denn's exclusive remedy for any claim entang whether based in contract or lort, shall be limited to the amount paid by the clean for the manages. All claims including block for negligance and any other cause whitebover's shall be determed when a whether where unless made in writing and received by Cardinat within 30 days after completion of the applicable capital cardinate is lable for includenal or consociorated administration. Including white applicable capital cardinate is lable for includenal or density in the capital cardinate is lable for includenal or density in the capital cardinate including the capital cardinate is lable for includenal or density in the capital cardinate in the capital cardinate is lable for includenal or density in the cardinate in the capital cardinate in the cardinate in the capital cardinate in the cardinate in the capital cardinate in the cardinate in th	y claim arising whether based in contract eemed waved unless made in writing an without limitation business interruptions.	or tork, shall be limited to the amount pa d received by Cardinal within 30 days are loss of use, or loss of profits incurred by	id by the cleant for the scompletion of the applicable clean? Its subsidiaries			
Relipquis ned By:	out of or related to the sufformance	Received By:	is besed upon say of the above stated in		☐ Yes ☐ No	Add'l Phone #: Add'l Fax #:	
Relinquished By:	Date:	Received By:	The same				

Relinquished By:

Time:

CHECKED BY:

Email Results

Sampler - UPS - Bus - Other: Delivered By: (Circle One)



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD.

**HOBBS NM, 88240** 

Fax To:

(575) 393-2432

Received:

07/16/2019

Reported:

07/18/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number: Project Location: NONE GIVEN

Sampling Date:

07/16/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: \*\* (See Notes)

Tamara Oldaker

### Sample ID: B 27 (H902440-01)

BTEX 8021B	mg/	kg	Analyze	d By: ms					_
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2019	ND	2.07	104	2.00	0.586	
Toluene*	<0.050	0.050	07/17/2019	ND	2.08	104	2.00	0.242	
Ethylbenzene*	<0.050	0.050	07/17/2019	ND	1.96	98.2	2.00	0.230	
Total Xylenes*	< 0.150	0.150	07/17/2019	ND	5.95	99.1	6.00	0.0747	
Total BTEX	<0.300	0.300	07/17/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	97.8	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10000	16.0	07/17/2019	ND	416	104	400	7.41	
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	07/16/2019	ND	190	95.1	200	0.351	
DRO >C10-C28*	1190	10.0	07/16/2019	ND	189	94.6	200	4.27	
EXT DRO >C28-C36	248	10.0	07/16/2019	ND					
Surrogate: 1-Chlorooctane	76.2	% 41-142	•						
Surrogate: 1-Chlorooctadecane	113 9	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PIEASE NOTE: Liability and Damages. Cordina's Rability and claim's exclusive remedy for any claim arising, whether based in contract or text, shall be invited to the amount paid by claim, including those for negligence and any other clause whatevers shall be deemed waived unless made in writing and received by Candinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential demages, including, without limitation, business interruptions, loss of or sae, or loss of profits inquired by claim's subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, 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 Cardinal Laboratories.

Celleg I treens

Celey D. Keene, Lab Director/Quality Manager

Page 2 of 6



**APACHE CORP - HOBBS BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

07/16/2019

Reported:

07/18/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

07/16/2019

Sampling Type:

Soil

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

Sampling Condition: Sample Received By: \*\* (See Notes)

Tamara Oldaker

### Sample ID: B 28 (H902440-02)

BTEX 8021B	mg/	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	B\$	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2019	ND	2.07	104	2.00	0.586	
Toluene*	<0.050	0.050	07/17/2019	ND	2.08	104	2.00	0.242	
Ethylbenzene*	<0.050	0.050	07/17/2019	ND	1.96	98.2	2.00	0.230	
Total Xylenes*	<0.150	0.150	07/17/2019	ND	5.95	99.1	6.00	0.0747	
Total BTEX	<0.300	0.300	07/17/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	98.3	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22000	16.0	07/17/2019	ND	416	104	400	7.41	
TPH 8015M	mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	07/16/2019	ND	190	95.1	200	0.351	
DRO >C10-C28*	3190	50.0	07/16/2019	ND	189	94.6	200	4.27	
EXT DRO >C28-C36	966	50.0	07/16/2019	ND					
Surrogate: I-Chlorooctane	97.8	% 41-142	?						
Surrogate: 1-Chlorooctadecane	208	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

College Intrene

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 6



**APACHE CORP - HOBBS BRUCE BAKER** 2350 W. MARLAND BLVD. **HOBBS NM, 88240** 

Fax To:

(575) 393-2432

Received:

07/16/2019

Reported:

07/18/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number:

**NONE GIVEN** 

Project Location:

**NOT GIVEN** 

Sampling Date:

07/16/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: \*\* (See Notes)

Tamara Oldaker

### Sample ID: B 29 (H902440-03)

BTEX 8021B	mg,	'kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	8\$	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2019	ND	2.07	104	2.00	0.586	
Toluene*	<0.050	0.050	07/17/2019	ND	2.08	104	2.00	0.242	
Ethylbenzene*	<0.050	0.050	07/17/2019	ND	1.96	98.2	2.00	0.230	
Total Xylenes*	<0.150	0.150	07/17/2019	ND	5.95	99.1	6.00	0.0747	
Total BTEX	<0.300	0.300	07/17/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	100	% 73,3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15400	16.0	07/17/2019	ND	416	104	400	7.41	
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	07/17/2019	ND	190	94.8	200	1.40	
DRO >C10-C28*	775	10.0	07/17/2019	ND	191	95.4	200	2.82	
EXT DRO >C28-C36	406	10.0	07/17/2019	ND					
Surrogate: 1-Chlorooctane	78.0	% 41-142	?						
Surrogate: 1-Chlorooctadecane	108	% 37.6-14	17						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Rebility and chern'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, including those for negligence any other chuse whatevoever shall be deemed waked unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential dam including, without limitation, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, as substitutes, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether claim is based upon any of the above stated neasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Carried trans

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 6



### **Notes and Definitions**

5-00	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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.
	Chloride by SM4500Cl-8 does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal'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, including those for negligence and any other clause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, toss of use, or loss of use, or loss of profits incurred by client, its substituries, affiliates or successors arising out of or related to the performance of the services hareunder by Cardinal, regardless of whether such claims is based upon any of the above stated massing or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg L. trene

Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: APACHE CACOCATEN	X	BILL TO	ANALYSIS REQUEST
Project Manager: Buce BAKEL		P.O. #	- 1
Address:	Co	Company:	
City: State:	Zip: Attn:	5.	
Phone #: Fax #:	Ad	Address:	
Project #: Project Owner:	r: City:	y:	
Project Name: CEDAL LAKE 737H	State:	ite: Zip:	
Project Location: CEDAL LAKE 737 H	Ph	Phone #:	
Sampler Name: VEFF Brown	Fax	Fax #:	
FOR LAB USE DINLY	MATRIX	PRESERV SAMPLING	
Lab I.D. Sample I.D.	G)RAB OR (C)OMP. CONTAINERS GROUNDWATER NASTEWATER SOIL DIL SLUDGE DTHER:	ACID/BASE: CE / COOL DTHER:	CL BIEX EXI. TPH
1 0 27			
2828		7-11-15 0833	
36 25		7.11-12 0834	
PLEASE NOTE: Liability and Damages. Cardinate liability and client's exclusive remedy for any claim arising whether based in contract or lost, shall be limited to the amount pield by the client for the	any claim erising whether based in contract or lot	t, shall be limited to the amount paid by the client for	

analyses. All claims including those for negligence and any other cause whatboever shall be deemed waked unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be labels for incidental or consequential disregate, including without intestion, business interruptions, best of use or best of profits shaured by claim, its subsidicates, settlings or successors arising out of or rejeted to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated persons or otherwise.

Refininguished By:

Refininguished By:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	-	telinquished By:	VEFF Shown	•	telinquisped By:
ornested .	Time:	Date:	Time: 25	1.0.11	Date:
Sample Condition CHECKED BY: Cool Infact (Initials) Sample Condition CHECKED BY: Cool Infact (Initials) Sample Condition CHECKED BY: Initial Check		Received By:	January Antaly		Received/By:
Janes, Janes	Jost	Childre Residence in Miller Him	REMARKS:	Fax Result:	Phone Result:   Yes  No Add'I Phone #:



July 23, 2019

JEFFREY BROOM

**APACHE CORP - HOBBS** 

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CEDAR LAKE FED CA 737H

Enclosed are the results of analyses for samples received by the laboratory on 07/22/19 16:55.

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 <a href="https://www.tceq.texas.gov/field/qa/lab-accred-certif.html">www.tceq.texas.gov/field/qa/lab-accred-certif.html</a>.

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.

Wite Sough

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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

07/22/2019

Reported:

07/23/2019

Project Name:

CEDAR LAKE FED CA 737H

Project Number:

NONE GIVEN

Project Location:

**NOT GIVEN** 

Sampling Date:

07/22/2019

Sampling Type:

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

### Sample ID: B #28 @ 3" (H902516-01)

BTEX 8021B	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2019	ND	2.10	105	2.00	1.96	
Toluene*	<0.050	0.050	07/23/2019	ND	2.18	109	2.00	3.34	
Ethylbenzene*	<0.050	0.050	07/23/2019	ND	2.04	102	2.00	2.70	
Total Xylenes*	<0.150	0.150	07/23/2019	ND	6.20	103	6.00	3.03	
Total BTEX	<0.300	0.300	07/23/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIE	102	% 73,3-12	9						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3000	16.0	07/23/2019	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	07/23/2019	ND	190	95.2	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	182	91.2	200	2.94	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					
Surrogate: 1-Chlorooctane	88.6	% 41-142	2						
Surrogate: 1-Chlorooctadecane	91.0	% 37.6-14	7						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Labikty and Damages, Cardinal's labikity and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be lamted to the amount paid by cleent for analyses. All claims, including those for negligence and any other clause whatsoever shall be dearmed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, ringerclass of whether such claims 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 Cardinal Laborationes.

with Sughe

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 2 of 5

**APACHE CORP - HOBBS** JEFFREY BROOM 2350 W. MARLAND BLVD. HOBBS NM, 88240 (575) 393-2432

Fax To:

Received:

07/22/2019

Reported:

07/23/2019

Project Name: Project Number: CEDAR LAKE FED CA 737H

Project Location:

NONE GIVEN

NOT GIVEN

Sampling Date:

07/22/2019

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Tamara Oldaker

### Sample ID: B #27 @ 3" (H902516-02)

BTEX 8021B	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/23/2019	ND	2.10	105	2.00	1.96	
Toluene*	<0.050	0.050	07/23/2019	ND	2.18	109	2.00	3.34	
Ethylbenzene*	<0.050	0.050	07/23/2019	ND	2.04	102	2.00	2.70	
Total Xylenes*	<0.150	0.150	07/23/2019	ND	6.20	103	6.00	3.03	
Total BTEX	<0.300	0.300	07/23/2019	ND					
Surrogate: 4-Bromofluorobenzene (PIL	102 9	% 73.3-12	9						
Chloride, SM4500CI-B	mg/	'kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	07/23/2019	ND	416	104	400	3.77	QM-07
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	07/23/2019	ND	190	95.2	200	1.01	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	182	91.2	200	2.94	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					
Surrogate: 1-Chlorooctane	96.3	% 41-142	?			731 1.111			
Surrogate: 1-Chlorooctadecane	98.0	% 37.6-14	7.						

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's **hability** 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 analysis. All claims, including those for negligence and any other clause whitesoniver shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequencial damages, including, without limitation, business interruptions, loss of vise, or loss of vi

whe Such

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Page 3 of 5



### **Notes and Definitions**

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\*\* Insufficient time to reach temperature.

Samples not received at proper temperature of 6°C or below.

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

### Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Cardinal's hability and cherit's exclusive remedy for any glarm ansing, whether based in contract or tort, shall be limited to the amount paid by chern for analyses. All clarms, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) clays after completion of the applicable service. In no event shall Cardinal be labely for inodental or consequenced damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by ment, its subsidiants, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims 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 Cardinal Laborationes.

unde Sough

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: A DOCAL	BILL TO		ANALYSIS REQUEST
Project Manager: Jethow () Smoon	P.O. #:		
Address:	Company:		
City: Holdos State: 01 Mazip: 88241)	Attn:		
Phone #: Fax #:	Address:		
Project #: Project Owner:	City:		
Project Name:	State: Zip:		
Project Location: Cerolar (also Fred (# 733 H	*		
Que Reselve s	Fax #:		
	PRESERV. SAMPLING	ING	
RS TER		PH .	
AB OF (INTAINE UNDWATEWATE	/BASE: COOL	/ lex	
(G)Ŕ # CO GRO		TIME	
C	7 7/22	13346	
	1 7/83		
PLEASE HOTE: Liability and Damages. Cardinal's liability and client's exclusive remark for any claim string whether based in contract or lort, shall be limited to the amount pead by the claim for the	or fort, shall be limited to the amount pa	aid by the client for the	
envisor. A certain incoming times on implyment many once cause windowers are several maps in writing and incoming type cause windowers are several maps and incoming and incoming one processing which you got any complete, including without intention, business informations, loss of these, or loss of profits incomed by calent, its subsidiaries, affiliation or successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of or related to the performance of services hearunder by Cardinal, regardless of whether successors arising out of the above stated reasons or otherwise.	received by Carturel Witten 30 days an ose of use, or loss of profits incurred by I besed upon any of the above stated re	ter compliation of the applicable richent, its authoridantes.	
Relinquished By:	11/100	Phone Result:   Yes   No	o Add'l Phone #: o Add'l Fax #:
	Max re		
	\		
Delivered By: (Circle One) 4.66 #97 Sample Condition	on CHECKED BY:		No. cillo
Sampler - UPS - Bus - Other: Connected 5.0 & Thes I Tes	4.2	Chron	1,60000

# Fisalle

Mag 31 2019 Apriche leder lek # 737 H pastore 1 BFC #1@1' 328533677, -103.9042480 11.1/30.0= 2.70 x 0.21 = 566 / Chour " / BFC #201' 32.8538201,-103.9042444 11.3/30.3 = 2.68x 0.06 = 160V Clear 3 / BFC+13@1' 32.853773-103.9043368 11.1/30.3=2.72x 0.08 = 135 Value 4/ BF1 #4 02' 32.8537196 -103.9043412 11.3/30.0 = 2.65x 0.08 = 132V elecus 5/ BFL #5@21 32.8536573 -103.9045720 113/30,2=2.67x 0.04. = 100 V Clerent 01 BFC \$6 041 32.853 5832-102,9044351 11.0(30.2 = 2.74x 0.08 = 219 & cken 1/ BFC #704' 32.8535218 -102,9043566 11.2130.2 = 2.69 x 0.06 = 161 V chear &/BF(#8@4' S2.8534968 -103.4047644. 11.2/30.2 = 2.69x 0.08 = 215 V dean

Final sample May 31, 2019 ledar lak Feel CA +731H wall surp t 4/ wcle1' 32.8538370-103.9042812 11.1/30,2=2.72× 00 = 163 Y 10/ WC2@1 32.8537787 -103.9043606 11.11 30.1 = 2.71 x .08 = 216 V 11/ WC302' 32.8536832-103.9044002 11.11 30.0= 2.71x.09= 243V N WC404' 32.8535601 -103.9044190 11.3/30,1= 2.66x ..07 = 186V 3/ WC5041 32.8534845 -103.9043434 11.31 30.2 = 2.767 x 0.15= 400V 0 ,4/ 10 (604' 52.85344BO -103,9043134 11.2/30.27 2.69x .05= «/ WC7@4' 32.8535168 -103.4043130 11.2/30.2-2.69x.08= 215/ 16/ MERBA, 35823882 -103 60A3731 11.3( 30.3= 268x,07= 187/ 1 WC902' 32.853 7193 -103,904 3338 N.3130.4 2.697 605= 1341 11/ WC/001' 32.8537987 -103.9043187 11.3/30.1= 2.66x 0.20 531 V 19/ WC 11@1' 32.8538669 -103 904,2265

11.1/30.3=2.72×0.07 1901

Cedar Lake Federal CA 737H Photos



**Photo of Pasture Excavation** 



**Photo of Pasture Excavation** 



**Photo of Pad Scrape** 



**Photo of Pad Scrape** 























