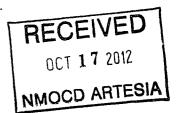
Creek AL Federal #12

Analytical Report- H202526	Sample Date	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
P-16'	10/16/2012	16'	585	11200	24000	35200	2240
P-18'	10/16/2012	18'	821	14400	19600	34000	2960
P-20'	10/16/2012	20'	237	3470	5020	8490	2240
P-22'	10/16/2012	22'	0.5	ND	ND	ND	4560
P-24'	10/16/2012	24'	.7	ND	24.9	24.9	7600

Site Ranking is Zero (0). Depth to Ground Water >100' (approx. 184', per trend map).

All results are ppm.Chlorides for documentation.

Release Date: 10/10/2012



YATES PETROLEUM CORPORATION

Wednesday, October 17, 2012 Creek AL Federal #12 Spill 1 & 2 Spill 1 Spill 2 ~23' depth 14' depth Lease Road



October 17, 2012

LUPE CARRASCO

Yates Energy Petroleum Corp

105 S 4th Street

Artesia, NM 88210

RE: CREEK AL FEDERAL #12

Enclosed are the results of analyses for samples received by the laboratory on 10/16/12 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab 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.

Celey & 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



Yates Energy Petroleum Corp LUPE CARRASCO 105 S 4th Street Artesia NM, 88210

(505) 748-4635 Fax To:

Received: Reported: 10/16/2012

10/17/2012

Project Name: Project Number: CREEK AL FEDERAL #12

Project Location:

SPILL 2

NOT GIVEN

Sampling Date:

10/16/2012

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: P-16' (H202526-01)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	25.4	5.00	10/17/2012	ND	2.09	105	2.00	6.28	
Toluene*	139	5.00	10/17/2012	ND	1.90	95.0	2.00	6.87	
Ethylbenzene*	258	5.00	10/17/2012	ND	1.88	93.9	2.00	7.09	
Total Xylenes*	163	15.0	10/17/2012	ND	5.49	91.4	6.00	7.03	
Surrogate 4-Bromofluorobenzene (PIL	118 %	6 89 4-12	6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240 16.0		10/17/2012 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	11200	200	10/16/2012	ND	190	95.2	200	0.948	
DRO >C10-C28	24000	200	10/16/2012	ND	190	95.1	200	9.90	
Surrogate 1-Chlorooctane	zate 1-Chlorooctane 362 %		0						
Surrogate: 1-Chlorooctadecane	260 %	63 6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE Liability and Damages. Cardinal's liability and client's exclusive remedy for 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 whatspeers 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 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 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 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 be liable for inodental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by Clardinal by Cardinal within thirty (30) days after completion of the applicable service. In no event shall be for inodental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by Clardinal be inable for inodental or consequential damages, including the profit of the applicable service. In no event shall be determined 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.

Celey D. Keine Celey D. Keene, Lab Director/Quality Manager

Page 2 of 8



Yates Energy Petroleum Corp LUPE CARRASCO 105 S 4th Street Artesia NM, 88210

Fax To: (505) 748-4635

Received:

10/16/2012

Sampling Date:

10/16/2012

Reported:

10/17/2012

Sampling Type:

Soil

Project Name:

CREEK AL FEDERAL #12

Sampling Condition:

Cool & Intact

Project Number: Project Location:

SPILL 2 NOT GIVEN Sample Received By:

Jodi Henson

Sample ID: P-18' (H202526-02)

BTEX 8021B	mg,	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	91.9	5.00	10/17/2012	ND	2.09	105	2.00	6.28	
Toluene*	236	5.00	10/17/2012	ND	1.90	95.0	2.00	6.87	
Ethylbenzene*	309	5.00	10/17/2012	ND	1.88	93.9	2.00	7.09	
Total Xylenes*	184	15.0	10/17/2012	ND	5.49	91.4	6.00	7.03	
Surrogate: 4-Bromofluorobenzene (PIL	Bromofluorobenzene (PIE 113 %		6						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2960	16.0	10/17/2012 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	14400	200	10/16/2012	ND	190	95.2	200	0.948	
DRO >C10-C28	19600 200 10/16/2012 ND		190	95.1	200	9.90			
Surrogate 1-Chlorooctane	318% 6		0						
Surrogate 1-Chlorooctadecane	230 9	63 6-15	4						

Cardinal Laboratories *=Accredited Analyte

PLEASE NOTE Llability 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 cause whistoever 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, 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 or otherwise Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratoms

Celey D. Keine



Yates Energy Petroleum Corp LUPE CARRASCO 105 S 4th Street Artesia NM, 88210

(505) 748-4635 Fax To:

Received:

10/16/2012

10/16/2012

Reported:

Sampling Date: Sampling Type:

Soil

Project Name:

10/17/2012

CREEK AL FEDERAL #12

Sampling Condition:

Cool & Intact

Project Number:

SPILL 2

Sample Received By:

Jodi Henson

Project Location:

NOT GIVEN

Sample ID: P-20' (H202526-03)

BTEX 8021B	mg/	'kg	Analyze	d By: AP			S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	22.2	1.00	10/17/2012	ND	2.09	105	2.00	6.28		
Toluene*	67.2	1.00	10/17/2012	ND	1.90	95.0	2.00	6.87		
Ethylbenzene*	91.0	1.00	10/17/2012	ND	1.88	93.9	2.00	7.09		
Total Xylenes*	56.9	3.00	10/17/2012	ND	5.49	91.4	6.00	7.03		
Surrogate: 4-Bromofluorobenzene (PIL	128 9	% 89.4-12	6							
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank		% Recovery True Value QC		RPD	Qualifier	
Chloride	2240	16.0	10/17/2012 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	3470	50.0	10/16/2012	ND	190	95.2	200	0.948		
DRO >C10-C28	5020	50.0	10/16/2012	/2012 ND		95.1	200	9.90		
Surrogate 1-Chlorooctane	-Chlorooctane 214 %		0							
Surrogate. 1-Chlorooctadecane	146 9	63 6-15	4							

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE Labdity 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 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 profits incurred by client, its subsidiaries, 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 Laboratories.

Celeg & Keine



Yates Energy Petroleum Corp LUPE CARRASCO 105 S 4th Street Artesia NM, 88210

Fax To: (505) 748-4635

Received:

10/16/2012

Sampling Date:

10/16/2012

Reported:

Sampling Type:

Soil

10/17/2012

Sampling Condition:

Cool & Intact

Project Name:

CREEK AL FEDERAL #12

Sample Received By:

Jodi Henson

Project Number:

SPILL 2

Project Location:

NOT GIVEN

Sample ID: P-22' (H202526-04)

BTEX 8021B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050 10/17/2012 ND		2.09	105	2.00	6.28		
Toluene*	0.137	0.050	10/17/2012	ND	1.90	95.0	2.00	6.87	
Ethylbenzene*	0.168	0.050	10/17/2012	ND	1.88	93.9	2.00	7.09	
Total Xylenes*	0.164	0.150	10/17/2012	ND	5.49	91.4	6.00	7.03	
Surrogate 4-Bromofluorobenzene (PIL	104 %	6 89.4-12	6						
Chloride, SM4500Cl-B	mg/l	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	10/17/2012 ND		400	100	400	0.00	
TPH 8015M	mg/l	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	10/17/2012	ND	190	95.2	200	0.948	
DRO >C10-C28	<10.0	10.0	10/17/2012	ND	190	95.1	200	9.90	
Surrogate: 1-Chlorooctane	89 1 %	65 2-140)						
Surrogate: I-Chlorooctadecane	8639	63 6-15-	4						

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 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 inodential or consequential damages, methods 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 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 approved of Cardinal Laboratornes.

Celey D. Keine



Yates Energy Petroleum Corp **LUPE CARRASCO** 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received: Reported: 10/16/2012

10/17/2012

Project Name:

CREEK AL FEDERAL #12

Project Number: Project Location:

NOT GIVEN

SPILL 2

Sampling Date:

10/16/2012

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Sample ID: P-24' (H202526-05)

BTEX 8021B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/17/2012	ND	2.09	105	2.00	6.28	
Toluene*	0.115	0.050	10/17/2012	ND	1.90	95.0	2.00	6.87	
Ethylbenzene*	0.304	0.050	10/17/2012	ND	1.88	93.9	2.00	7.09	
Total Xylenes*	0.254	0.150	10/17/2012	ND	5.49	91.4	6.00	7.03	
Surrogate: 4-Bromofluorobenzene (PIL	109 5	% 89.4-12	6						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result Reporting Lir		Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	10/17/2012	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	10/17/2012	ND	190	95.2	200	0.948	
DRO >C10-C28) >C10-C28 24.9		10/17/2012	ND	190	95.1	200	9.90	
Surrogate: 1-Chlorooctane	88.6	% 65 2-14	0						
Surrogate 1-Chlorooctadecane	88 9	% 63.6-15	4						

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 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 limitation, business interruptions, loss of use, or 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 Laboratories.

Celey D. Keine



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.
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 Liabitity and Damages Cardanal'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 whistoever 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 incidence or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors ansing 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.

Celeg & Keine

Page 7 of 8



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

	Project Manager:	Lupe Carrasco	<u> </u>		<u></u>													Proj	ect	Nam	e:		<u> </u>	í	, 4, e		<i>.</i>	. , ;	, , ,	c:		11
	Compi (505) 393-2326	Yates Petroleur	n Corporatio	n		,													Pro	ject	#:_											_
	Company Address:	105 South 4th S	Street															Pi	roje	et Lo	oc: _											
	City/State/Zip:	Artesia, NM 8	8210																РО	O#: 103-163												
	Telephone No:	575-748-4350				<u></u>	·Fax No:	· _						•		_	Ře	port	For	mat:	it: X Standard TRRP NPDES											
	Sampler Signature:	Superior .	1 2	. 15 1			e-mail:		lca	ırra	scc	@y	ate	spe	etro	leu	ım.c	om		•					,							
ab use o	only)		<u> </u>					-	,	P	reserv	ation -	& # o	f Cont	ainen	s	Ma	trix	100	_		TCL	P: L.	Analy	ze F	8260 S					1, 48, 72 hrs	
LAB # (lab use only)	FIET	LD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	fotal #, of Containers	lce	HNO3	HCI H SO	NaOH	Na ₂ S ₂ O ₃	None	Other (Specify)	DW≠Drinking Water St≖Sludge		4181	TPH: TX 1005 TX 100	Cations (Ca, Mg, Na, K)	Anions (Cl. SO4, Alkaiinity)	SAR / ESP / CEC	Volatiles	Semivolatiles	7.3/5030 or BTEX	RCJ	O.R.M.	Chiorides	AR	RUSH TAT (Pre-Schedule) 24,	
_ 	12-13	·		Ш	16	11/2/12		11_	T					\dagger			<u> </u>	, 2	<u> </u>		<u> </u>	₹ '	2 2	-	S	11.5	Œ	Z	N N	"十	// °	4
رعب	17 18	······································			18	10/12/12				П		1	1						<i>y</i>		\top	1	1	1	T	K	П		2	\top	1	1
3				`	20'	10/16/57													1			1			T	Â.			A:		à	7
Ч	2-22				28 .	20/16/11								1					-{			-				ij.			K	Т	À	1
5	P-54			·	25%	10,26,47		,											35 -4					ŀ		ŵ			4	\bot	K]
		· · · · · · · · · · · · · · · · · · ·		ļ								- -	- -	+	\vdash				├			-	4	4	┼	_	_		-	- -	+	4
							·					\dashv	+	╁	\vdash	\vdash			+		\dashv	+	+	+	+-	╁	-			十	++	\dashv
												1	1									1	1	1	T			1.		1	\Box]
Special	Instructions:			l	<u>l</u>	<u> </u>				L	·			<u> </u>	<u> </u>	لبا	L		<u></u>	L	Lab	orat	00/	Com	mer	10.				Щ	Ш	4
Z							. ;														Sam	ple	Cont		s int	act?) * [Ć		N.	
	shed by:		Date /0//u//2 Date	/	ime - 30 ₀₀ imé	Received by:	the	1)	Δø	91)	L				/D	Da ///	0/1%	2	Tim		Labe Cus Cus San	els o tody tody nole	seal seal Han	ntain Is on Is on d De	er(s) cont cool livere	aine er(s	r(s))		4	A5.401.	22222	
Relinquis	shed by:		Date	T	ime	Received by ELC	OT:									Da	ate		Tim	e			ature	Upo	n Re	celp				5	°C	