

## 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.

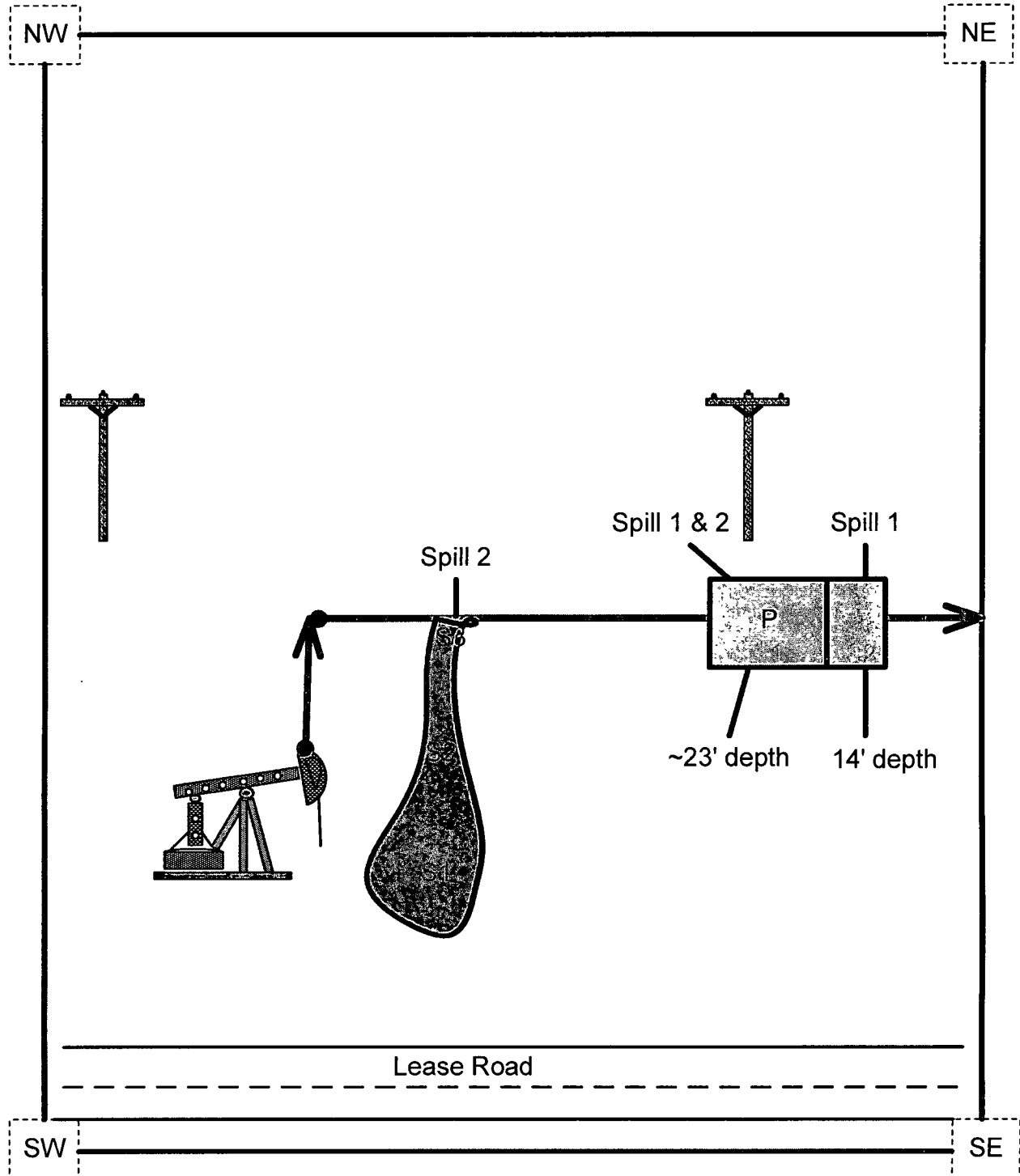
Release Date: 10/10/2012



# YATES PETROLEUM CORPORATION

Wednesday, October 17, 2012

Creek AL Federal #12



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\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

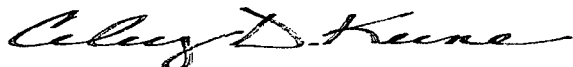
Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

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

Accreditation applies to public drinking water matrices.

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

Sincerely,



Caley D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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:	SPILL 2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

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

BTX 8021B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>25.4</b>	5.00	10/17/2012	ND	2.09	105	2.00	6.28	
<b>Toluene*</b>	<b>139</b>	5.00	10/17/2012	ND	1.90	95.0	2.00	6.87	
<b>Ethylbenzene*</b>	<b>258</b>	5.00	10/17/2012	ND	1.88	93.9	2.00	7.09	
<b>Total Xylenes*</b>	<b>163</b>	15.0	10/17/2012	ND	5.49	91.4	6.00	7.03	

Surrogate: 4-Bromofluorobenzene (PIC) 118 % 89 4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2240</b>	16.0	10/17/2012	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>11200</b>	200	10/16/2012	ND	190	95.2	200	0.948	
<b>DRO &gt;C10-C28</b>	<b>24000</b>	200	10/16/2012	ND	190	95.1	200	9.90	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>11200</b>	200	10/16/2012	ND	190	95.2	200	0.948	
<b>DRO &gt;C10-C28</b>	<b>24000</b>	200	10/16/2012	ND	190	95.1	200	9.90	

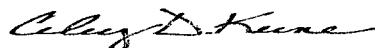
Surrogate: 1-Chlorooctane 362 % 65 2-140

Surrogate: 1-Chlorooctadecane 260 % 63 6-154

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 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:	SPILL 2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

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

BTEX 8021B		mg/kg		Analyzed 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) 113 % 89 4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed 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		Analyzed By: MS					
									S-06

Surrogate: 1-Chlorooctane 318 % 65.2-140

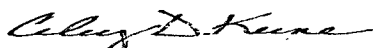
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	14400	200	10/16/2012	ND	190	95.2	200	0.948	
DRO >C10-C28	19600	200	10/16/2012	ND	190	95.1	200	9.90	

Surrogate: 1-Chlorooctadecane 230 % 63 6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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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:	SPILL 2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: P-20' (H20526-03)**

BTX 8021B		mg/kg		Analyzed By: AP				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>22.2</b>	1.00	10/17/2012	ND	2.09	105	2.00	6.28	
<b>Toluene*</b>	<b>67.2</b>	1.00	10/17/2012	ND	1.90	95.0	2.00	6.87	
<b>Ethylbenzene*</b>	<b>91.0</b>	1.00	10/17/2012	ND	1.88	93.9	2.00	7.09	
<b>Total Xylenes*</b>	<b>56.9</b>	3.00	10/17/2012	ND	5.49	91.4	6.00	7.03	

Surrogate: 4-Bromofluorobenzene (PIL) 128 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2240</b>	16.0	10/17/2012	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10</b>	<b>3470</b>	50.0	10/16/2012	ND	190	95.2	200	0.948	
<b>DRO &gt;C10-C28</b>	<b>5020</b>	50.0	10/16/2012	ND	190	95.1	200	9.90	

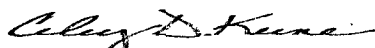
Surrogate: 1-Chlorooctane 214 % 65.2-140

Surrogate 1-Chlorooctadecane 146 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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LUPE CARRASCO  
105 S 4th Street  
Artesia NM, 88210  
Fax To: (505) 748-4635

Received: 10/16/2012  
Reported: 10/17/2012  
Project Name: CREEK AL FEDERAL #12  
Project Number: SPILL 2  
Project Location: NOT GIVEN

Sampling Date: 10/16/2012  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

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

BTX 8021B		mg/kg		Analyzed 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*	<b>0.137</b>	0.050	10/17/2012	ND	1.90	95.0	2.00	6.87	
Ethylbenzene*	<b>0.168</b>	0.050	10/17/2012	ND	1.88	93.9	2.00	7.09	
Total Xylenes*	<b>0.164</b>	0.150	10/17/2012	ND	5.49	91.4	6.00	7.03	

Surrogate 4-Bromofluorobenzene (PIL) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>4560</b>	16.0	10/17/2012	ND	400	100	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	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	

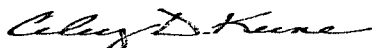
Surrogate 1-Chlorooctane 89.1 % 65.2-140

Surrogate 1-Chlorooctadecane 86.3 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

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 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:	SPILL 2	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: P-24' (H20526-05)**

BTX 8021B			mg/kg		Analyzed 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 (PIC) 109 % 89.4-126

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AP				
Analyte	Result	Reporting Limit	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		Analyzed 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	24.9	10.0	10/17/2012	ND	190	95.1	200	9.90	

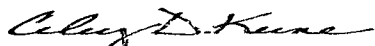
Surrogate 1-Chlorooctane 88.6 % 65.2-140

Surrogate 1-Chlorooctadecane 88.9 % 63.6-154

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

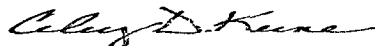
S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
ND	Analyte NOT DETECTED at or 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

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