MARTIN YATES. III 1912-1985 FRANK W. YATES 1936-1996

S.P YATES



105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

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2RA-750 2RA-251 2RA-765

October 18, 2012

Atten: Mike Bratcher

NM Oil Conservation Division

District 2 Office

Artesia, NM 88220-6292

Mr. Bratcher:

Yates Petroleum Corp would like to request closure of the Anemone ANE Federal #2 for the releases occurring on January 20, 2011, April 15, 2011, and April 22, 2011. Request for closure is based on a site ranking of Zero (0). Below is a summary of analytical findings. The official reports are enclosed.

Site Ranking Zero Depth to Groundwater 585'				
	BTEX	GRO	DRO	Chloride
West Excavation S1	1 962	96.2	3040	32
West Excavation S2	0.515	20.4	1250	64
Slop Tank	6.893	366	3390	16
Middle Excavation	1.815	51.7	1980	167
East Excavation	ND	ND	155	47.4

Thank you,

YATES PETROLEUM CORPORATION

Amanda Trujillo

KATHY H. PORTER

DENNIS G. KINSEY





October 05, 2012

AMANDA TRUJILLO Yates Energy Petroleum Corp 105 S 4th Street Artesia, NM 88210

RE. ANENOME BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/01/12 16:30.

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.tcaq.texas.gov/field/ga/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

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Sincerely,

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Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/01/2012	Sampling Date:	09/28/2012
Reported:	10/05/2012	Sampling Type:	Soil
Project Name:	ANENOME BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	SECTION 9 T22S R24E		

Sample ID: WEST EXC SAMPLE 1 (H202393-01)

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*	0.155	0.050	10/04/2012	ND	1.99	99.4	2.00	6.80		
Toluene*	0.067 0.050		10/04/2012	ND	2.21	110	2.00	6.99		
Ethylbenzene*	1.74	0.050	10/04/2012	ND	2.17	109	2.00	7.00		
Total Xylenes*	<0.150	0.150	10/04/2012	ND	6.79	113	6.00	6.48		
Surrogate 4-Bromofluorobenzene (PIE	268 9	6 89 4-12	6							
ТРН 8015М	mg/	kg	Analyzed By: MS			· · · · · · · · · · · · · · · · · · ·			S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	96.2	50.0	10/04/2012	ND	205	102	200	3.89		
DR0 >C10-C28			10/04/2012	ND	201	101	200			
	3040	50.0	10/04/2012	ND	201	101	200	7.92		
Surrogate 1-Chlorooctane	3040	6 65 2-14	10/04/2012 	ND	201	101	200			

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*=Accredited Analyte

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In Art NOTE Liability and Damages Cardinal's liability and client'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 involution 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 incoental or consequential damages, including, without limitation, business instemptions, 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 direct upon any of the bible so rotherwse. Results relate only to the samples identified above. This exprodued exception full with internaptional (Jaborationes.

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/01/2012	Sampling Date:	09/28/2012
Reported:	10/05/2012	Sampling Type:	Soil
Project Name	ANENOME BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	SECTION 9 T22S R24E		

Sample ID: WEST EXC SAMPLE 2 (H202393-02)

8TEX 8021B	mg/l	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.103	0.050	10/04/2012	ND	1.99	99.4	2.00	6.80	
Toluene*	0,345	0.050	10/04/2012	ND	2.21	110	2.00	6.99	
Ethylbenzene*	0.067	0.050	10/04/2012	ND	2.17	109	2.00	7.00	
Total Xylenes*	<0.150	0.150	10/04/2012	ND	6.79	113	6.00	6.48	
Surrogate 4-Bromofluorobenzene (PIE	109 %	6 89 4-12	6						
TPH 8015M	mg/l	<g< td=""><td>Analyze</td><td>d By: MS</td><td></td><td></td><td></td><td></td><td></td></g<>	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	20.4	10.0	10/04/2012	ND	205	102	200	3.89	
DRO >C10-C28	1250	10.0	10/04/2012	ND	201	101	200	7.92	
Surrogate 1-Chlorooctane	906%	6 65 2-14)				<u></u>		
Surrogate 1-Chlorooctadecane	126 %	63 6-15-	4						

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*=Accredited Analyte

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PIFASE NOTF Lability and Damages Cardinal's liability and chent'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 whissoever 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, webout limitation, business interruptions, loss of use, or loss of profits included by client, its subsidiaries, affidiates or successors anong out of or related to the performance of the services hereunder by Cardinal, regardless of whether such clients based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced excepts in full with matten approval of Cardinal Laborations.

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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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PELASE ND11. Lubakity and Damages Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or Lort, shall be limited to the amount paid by client for analyses. All claims, including those for negligenie 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's liability and client's exclusive remedy for any claim ansing, withing, without limits (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidential or consequential damages, inclusing, without imitation, business interruptions, 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 lineaunder 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

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Celey D. Keene, Lab Director/Quality Manager

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	Project Manager. Amanda Trujillo															Pr	ojeci	t Nan	ne. —			<u>/</u>	nen	ome	: Ba	ttery	/		
	Comp: (505) 393-2326 Yates Petroleum C	Corporation	1					_									Pr	oject	t #:	·			·						-
	Company Address 105 South 4th Stre	eet															Projo	ect Lo	oc:		_	Se	otion	<u>9</u> T	228	3 R2-	4E	. <u></u>	
	City/State/Zip. Artesia, NM 882	10				<u></u>												PC) #:										
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October 05, 2012

AMANDA TRUJILLO Yates Energy Petroleum Corp 105 S 4th Street Artesia, NM 88210

RE' ANENOME BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/01/12 16:30.

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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.tcag.texas.gov/field/qa/lab_accred_certif.html.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celeg D. Kene_

Celey D. Keene Lab Director/Quality Manager



Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/01/2012	Sampling Date:	09/28/2012
Reported:	10/05/2012	Sampling Type:	Soil
Project Name:	ANENOME BATTERY	Sampling Condition:	<pre>** (See Notes)</pre>
Project Number:	NONE GIVEN	Sample Received By:	Amanda Ponce
Project Location:	SECTION 9 T22S R24E		

Sample ID: WEST EXC SAMPLE 1 (H202393-01)

Chloride, SM4500Cl-B	mg/	kg	Analyzeo	i By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/05/2012	ND	400	100	400	0.00	

Sample ID: WEST EXC SAMPLE 2 (H202393-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyle	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/05/2012	ND	400	100	400	0.00	

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Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
++	Samples not received at proper temperature of 6°C or below
***	Insufficient time to reach temperature.
-	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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Celey D. Keene, Lab Director/Quality Manager

Page 3 of 4

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Comp. (505) 393-2326 Yates Petrole	um Corporation	n													-		Pro	oject	t #											
Company Address: 105 South 4th	Street	<u> </u>			·····										-	F	roje	ct L	oc:_				Sec	tion	9 T2	225	R24	E		
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October 18, 2011

AMANDA TRUJILLO Yates Energy Petroleum Corp 105 S 4th Street Artesia, NM 88210

RE: ANENOME ANE FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 10/12/11 10:40.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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.

Celeg & Keine

Celey D. Keene Lab Director/Quality Manager

_Sincerely,



Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/12/2011	Sampling Date:	10/11/2011
Reported:	10/18/2011	Sampling Type:	Soil
Project Name:	ANENOME ANE FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST SIDE (H102198-01)

BTEX 8021B	mg/I	kg	Analyze	ed By: AP					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/14/2011	ND	2.08	104	2.00	0.829	
Toluene*	3.87	0.050	10/14/2011	ND	2.07	103	2.00	0.173	
Ethylbenzene*	2.95	0.050	10/14/2011	ND	2.05	102	2.00	0.0754	
Total Xylenes*	5.54	0.150	10/14/2011	ND	6.20	103	6.00	1.33	
Surrogate · 4-Bromofluorobenzene (PIL	411%	64 4-13-	1						<u> </u>
TPH 8015M	mg/l	g	Analyze	d By: AB		<u></u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	1320	50.0	10/12/2011	ND	173	86.5	200	0.679	
DRO >C10-C28	5290	50.0	10/12/2011	ND	167	83.4	200	0.0336	
Surrogate 1-Chlorooctane	112 %	55.5-154	!						
Surrogate. 1-Chlorooctadecane	113 %	57 6-158	•						

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Celey Di Keine

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/12/2011	Sampling Date:	10/11/2011
Reported:	10/18/2011	Sampling Type:	Soil
Project Name:	ANENOME ANE FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SLOP TANK (H102198-02)

BTEX 8021B	mg/	kg	Analyze	Analyzed By: AP											
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier						
Benzene*	<0.050	0.050	10/14/2011	ND	2.08	104	2.00	0.829							
Toluene*	0.913	0.050	10/14/2011	ND	2.07	103	2.00	0.173							
Ethylbenzene*	2.22	0.050	10/14/2011	ND	2.05	102	2.00	0.0754							
Total Xylenes*	3.76	0.150	10/14/2011	ND	6.20	103	6.00	1.33							
Surrogate 4-Bromofluorobenzene (PIL	230 %	64 4-13	4												
TPH 8015M	mg/l	(g	Analyze	d By: AB											
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier						
GRO C6-C10	366	10.0	10/12/2011	ND	173	86.5	200	0.679							
DRO >C10-C28	3390	10.0	10/12/2011	ND	167	83.4	200	0.0336							
Surrogate I-Chlorooctane	111%	5 55 5-15	4	<u></u>			, , <u>, , </u> , , ,								
Surrogate 1-Chlorooctadecane	132 %	57 6-15	8												

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Celeg L'Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

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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Celey D. Keene, Lab Director/Quality Manager

	ARDINAL LABORATORIES	5 1 88240		8 8 8	(505) 393-2326 FAX (505) 393-2476																												
	Project Manager: Amanda Truji	llo		· 								<u></u>						Pro	ject	Nar	ne:_			Ar	nen	ome	<u>1A e</u>	<u>IE F</u>	ede	eral	#2		
	Comp: (505) 393-2326 Yates Petrole	um Corporatio	'n	ı 															Pro	ojec	t #: _										<u> </u>		
	Company Address: 105 South 4tt	n Street		i												_		Ρ	roje	ct L	oc: _			A	nen	om	<u>a AN</u>	<u>↓E</u> F	ede	əral	#2		
	City/State/Zip: Artesia, NM	88210			·····	<u></u>														PC)#: ₋			-									
	Telephone No: 575-748-431	0				Fax No:			········							_	Re	port	For	mat	::	λ	Star	ndar	d	[T [RRF	2			PDE	5
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October 18, 2011

AMANDA TRUJILLO Yates Energy Petroleum Corp 105 S 4th Street Artesia, NM 88210

RE: ANENOME ANE FEDERAL #2

Enclosed are the results of analyses for samples received by the laboratory on 10/12/11 10:40.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

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 (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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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Analytical Results For:

Yates Energy Petroleum Corp AMANDA TRUJILLO 105 S 4th Street Artesia NM, 88210 Fax To: (505) 748-4635

Received:	10/12/2011	Sampling Date:	10/11/2011
Reported:	10/18/2011	Sampling Type:	Soil
Project Name:	ANENOME ANE FEDERAL #2	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST SIDE (H102198-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM		·····	· · · · · · · · · · · · · · · · · · ·		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/15/2011	ND	400	100	400	11.3	

Sample ID: SLOP TANK (H102198-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/15/2011	ND	400	100	400	11.3	

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Celeg in Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	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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Celey D. Keene, Lab Director/Quality Manager

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Analytical Report 426797

for Yates Petroleum Corporation

Project Manager: Amanda Trujillo Amenome Battery

08-SEP-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia.(362), Kentucky (85)... Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



08-SEP-11



Project Manager: Amanda Trujillo Yates Petrolcum Corporation 105 South Fourth St. Artesia, NM 88210

Reference: XENCO Report No: 426797 Amenome Battery Project Address:

Amanda Trujillo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 426797. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 426797 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II Odessa Laboratory Manager

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Sample Cross Reference 426797

Yates Petroleum Corporation, Artesia, NM

Amenome Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West	S	08-30-11 09:30	3 - 3.5 ft	426797-001
Middle	S	08-30-11 09:30	2 - 2.5 ft	426797-002
East	S	08-30-11 09:30	4 - 4.5 ft	426797-003

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CASE NARRATIVE

Client Name: Yates Petroleum Corporation Project Name: Amenome Battery



Project ID: Work Order Number: 426797 Report Date: 08-SEP-11 Date Received: 08/31/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-869210 BTEX by EPA 8021B SW8021BM

Batch 869210, 4-Bromofluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 426797-001.

4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis Samples affected are: 426797-002, -003.

SW8021BM

Batch 869210, Ethylbenzene, Toluene, m_p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 426797-002, -003, -001. The Laboratory Control Sample for Toluene, Ethylbenzene, m_p-Xylenes, o-Xylene is within laboratory Control Limits

Batch: LBA-869326 TPH By SW8015B Mod SW8015B_NM

Batch 869326, C6-C10 Gasoline Range Hydrocarbons recovered below QC limits in the Blank Spike Duplicate however was within limits for the Blank Spike, therefore data is reported as is. Samples affected are: 426797-002, -003, -001.



Project Id:

Contact: Amanda Trujillo

Certificate of Analysis Summary 426797

Yates Petroleum Corporation, Artesia, NM

Project Name: Amenome Battery



Date Received in Lab: Wed Aug-31-11 10:00 am

Project Location:

Report Date: 08-SEP-11 Project Manager: Brent Barron II

]		
	Lab Id:	426797-0	001	426797-(002	426797-0	003			
Analysis Doguostad	Field Id:	East West	-	Middle	e	-East	mest			
Anuiysis Kequesteu	Depth:	3-3.5 f	ì	2-2.5 f	t	4-4.5 f	t			
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	, Aug-30-11	09.30	Aug-30-11	09:30	Aug-30-11	09 [.] 30			
BTEX by EPA 8021B	Extracted:	Sep-02-11	12.00	Sep-02-11	12 00	Sep-02-11	12:00			
	Analyzed:	Sep-03-11	15 21	Sep-03-11	15.44	Sep-03-11	16:08			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Benzene		ND	0 00537	ND	0 00506	ND	0 203			
Toluene		ND	0 0107	ND	0 0101	0.514	0 407	· · · · · · · · · · · · · · · · · · ·		
Ethylbenzene	-2012:20	ND	0 00537	0111	0 00506	1.28	0 203		······································	
m_p-Xylenes		ND	0 0107	0.221	0 0101	9 49	0 407			III and a faith that a construction is a second supported by
o-Xylene .		ND	0 00537	0.310	0 00506	2 53	0 203			
Total Xylenes		, ND	0 00537	0 531	0 00506	12 0	0 203			
Total BTEX		ND	0 00537	0 642	0 00506	13.8	0 203			
Percent Moisture	Extracted:	t								
	Analyzed:	Aug-31-11	15.55	Aug-31-11	15 55	Aug-31-11	15 55			
	Units/RL:	%	RL	%	RL	%	RL			
Percent Moisture	ALL STATE & MARKED BELLEVILLE AND ADDRESS.	6 83	1 00	1.79	1.00	1.84	1.00			
TPH By SW8015B Mod	Extracted:	Sep-01-11	13:40	Sep-01-11	13.40	Sep-01-11	13:40			
	Analyzed:	Sep-03-11	05.13	Sep-03-11	05:44	Sep-03-11	06:15			
	Units/RL:	; mg/kg	RL	mg/kg	RL	mg/kg	RL			
C6-C10 Gasoline Range Hydrocarbons	an a an	ND	16.1	51.7	15.3	595	76 1	· · · · · · · · · · · · · · · · · · ·		
C10-C28 Diesel Range Hydrocarbons	s 💷 da kanan ini muna nanananananan kana Juana.	155	16.1	1980	153	7030	76 1	· · · · · · · · · · · · · · · · · · ·		
Total TPH		155	161	2030	153	7630	76.1			
	and the second									

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our flability is limited to the autoint invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron II

Odessa Laboratory Manager

Final 1.000



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or В laboratory contamination.
- The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. D Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection
PQL Practical Quantitation Limit	MQL Method Quantitation Limit	LOQ Limit of Quantitation
DL Method Detection Limit		
NC Non-Calculable		
+ Outside XENCO's scope of NEL.	AC Accreditation.	

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(770) 449-8800	(770) 449-5477
(602) 437-0330	



Project Name: Amenome Battery

Vork Orders : 426797	, Sampler 426707-001 / SMP	Pote	Project I	D:		
Lab Baten #: 809520	Date Analyzed: 09/03/11 05:13	SU	URROGATE R	ECOVERY	STUDY	
TPH B	Sy SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			D		
I-Chlorooctane		109	99.8	109	70-135	
o-Terphenyl		56 6	49 9	113	70-135	
Lab Batch #: 869326	Sample: 426797-002 / SMP	Batc	ch: 1 Matrix	: Soil		
Units: mg/kg	Date Analyzed: 09/03/11 05:44	SU	RROGATE R	ECOVERYS	STUDY	
трн в	y SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		113	99.9	113	70-135	
o-Terphenyl		60.0	50.0	120	70-135	
Lab Batch #: 869326	Sample: 426797-003 / SMP	Batc	h: l Matrix	:Soil		
Units: mg/kg	Date Analyzed: 09/03/11 06:15	SU	RROGATE R	ECOVERY S	STUDY	
ТРН В	y SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I-Chlorooctane		114	99.6	114	70-135	
o-Terphenyl		45 2	49.8	91	70-135	
Lab Batch #: 869210	Sample: 426797-001 / SMP	Bate	h: ¹ Matrix	: Soil		
Units: mg/kg	Date Analyzed: 09/03/11 15:21	SU	RROGATE R	ECOVERY S	STUDY	
ΒΤΕλ	Angleta	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1.4 Difluorobongona	Analytes	0.0297	0.0200	[~]	80,120	
4-Bromofluorobenzene		0.0198	0.0300	90	- 80=120	*
Lab Patab # \$60210	Sample: 426707-002 / SMD	0 0 1 7 0 D - 4 - 1	h. 1 Mot	Soul	00 120	
Lag Daten #: 009210	Date Analyzed: 09/03/11 15:44	SU	RROGATE R	ECOVERY S	STUDY	
BTEX	Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
l,4-Dıtluorobenzene		0 0253	0 0300	84	80-120	
4-Bromofluorobenzene		0.0505	0 0300	168	80-120	*

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.



Project Name: Amenome Battery

Work Orders : 426797	, Sample: 426797-003 / SMP	Bate	Project II	D: · Soil		
Units: mg/kg	Date Analyzed: 09/03/11 16:08	SU	RROGATE RI	ECOVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0260	0 0300	87	80-120	
4-Bromofluorobenzene		0.0435	0.0300	145	80-120	*
Lab Batch #: 869326	Sample: 610994-1-BLK / B	LK Bate	h: 1 Matrix:	:Solid		
Units: mg/kg	Date Analyzed: 09/03/11 02:06	SU	RROGATE RI	ECOVERY	STUDY	
ТРН В	sy SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	-	86 1	100	86	70-135	<u></u>
o-Terphenyl		44.4	50.0	89	70-135	
Lab Batch #: 869210	Sample: 610920-1-BLK / B	LK Bate	h: l Matrix:	Solid		
Units: mg/kg	Date Analyzed: 09/03/11 08:30	SU	RROGATE RE	ECOVERY S	STUDY	
BTEX	(by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Dıfluorobenzene		0.0282	0.0300	94	80-120	
4-Bromofluorobenzene		0 0256	0 0300	85	80-120	
Lab Batch #: 869326	Sample: 610994-1-BKS / BI	KS Batc	h: ¹ Matrix:	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 09/03/11 01:03	SU	RROGATE RF	COVERY S	STUDY	. <u> </u>
ТРН В	y SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		101	100	101	70-135	
o-Terphenyl		···· 42 9 ·	50 1	- 86	70-135	
Lab Batch #: 869210	Sample: 610920-1-BKS / BF	KS Batcl	h: 1 Matrix:	Solid	ini laine ann an gu ann ann an an bh	
Units: mg/kg	Date Analyzed: 09/03/11 06.59	SU	RROGATE RE	COVERYS	STUDY	
BTEX	C by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0297	0.0300	99	80-120	
4-Bromofluorobenzene		0.0279	0 0300	93	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits. data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / BAll results are based on MDL and validated for QC purposes.



Project Name: Amenome Battery

Work Orders : 426797	7, Sampla: 610994-1-BSD / B ⁶	SD Batch	Project II): • Solid		
Units: mg/kg	Date Analyzed: 09/03/11 01:34	SUR	ROGATE RI	ECOVERY	STUDY	
ТРН В	3y SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		96.2	99 9	96	70-135	
o-Terphenyl		40 5	50 0	81	70-135	
Lab Batch #: 869210	Sample: 610920-1-BSD / BS	SD Batch:	l Matrix	Solid		L
Units: mg/kg	Date Analyzed: 09/03/11 07:21	SUR	ROGATE RF	COVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1.4-Difluorobenzene		0.0285	0.0300	95	80-120	
4-Bromotluorobenzene		0.0279	0.0300	93	80-120	
Lab Batch #: 869326	Sample: 426704-001 S / MS	Batch:	1 Matrix:	Soil		l martine and charge
Units: mg/kg	Date Analyzed: 09/03/11 10:32	SUR	ROGATE RF	COVERY	STUDY	
ТРН В	sy SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		112	101	111	70.135	
o-Terphenyl		46.3	50.3	92	70-135	
Lah Batch # 869210	Sample: 426978-002 S / MS	Batch	1 Matrix	Soul		
Lab Daten #. 000-200	Date Analyzed: 09/03/11 12:43	SUR	ROGATE RF	COVERY	STUDY	
BTEX	C by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		2.0200		20.100	
1,4-Difluorobenzene		0.0284	0.0300	95	80-120	
T & D +++ 4, 860326	S 426704 001 SD / M	0.0270 Pataka	1 Motering	24 S all	00-120	
Lab Batch #: 009520	Data A polyardy 00/02/11 11:02	SU Baten:	ROGATE RF	COVERY (STUDY	<u></u>
TPH B	y SW8015B Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
I-Chlorooctane		102	99 5	103	70-135	
o-Terphenyl		40.8	49.8	82	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes.



Project Name: Amenome Battery

Work Orders: 426797	, ,												
Lab Batch #: 869210	Sample: 426978-002 SD / 1	MSD Batch: I Matrix: Soil											
Units: mg/kg	Date Analyzed: 09/03/11 13:05	SURROGATE RECOVERY STUDY											
BTEX by EPA 8021B		Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags							
	Anarytes												
1,4-Difluorobenzene		0.0264	0.0300	88	80-120								
4-Bromotluorobenzene		0 0257	0.0300	86	80-120								

* Surrogate outside of Laboratory QC limits
 ** Surrogates outside limits, data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B All results are based on MDL and validated for QC purposes





Project Name: Amenome Battery

Work Order #: 426797 Analyst: ASA	Project ID: Date Prenared: 09/02/2011 Date Analyzed: 09/03/2011											
Lab Batch ID: 869210 Sample: 610920-1-	BKS	Batel	n #: 1		Matrix: Solid							
Units: mg/kg		BLAN	K/BLANK S	SPIKE / B	BLANK S	PIKE DUPI	ICATE I	RECOVE	RY STUD	Y		
BTEX by EPA 8021B	Blank Sample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate Becult 151	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag	
Analytes		[10]	- 121	141		Kesun [r]	[0]					
Benzene	<0 00100	0.100	0.111	111	0 100	0.108	108	3	70-130	35		
Toluene	<0 00200	0 100	0 0974	97	0.100	0 0965	97	1	70-130	35		
Ethylbenzene	<0 00100	0 100	0.105	105	0.100	0.104	104	1	71-129	35		
m_p-Xylenes	<0.00200	0.200	0.209	105	0.200	0.209	105	0	70-135	35		
o-Xylene	<0 00100	0.100	0.0980	98	0 100	0.0975	98	1	71-133	35		
Analyst: BBH	D	ate Prepar	ed: 09/01/201	1			Date A	nalyzed: (9/03/2011			
Lab Batch ID: 869326 Sample: 610994-1-	BKS	Bate	h #: 1					Matrix: S	Solid			
Units: mg/kg	,	BLAN	K/BLANK S	SPIKE / E	BLANK S	PIKE DUPI	LICATE	RECOVI	ERY STUD	PΥ		
TPH By SW8015B Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag	
C6-C10 Gasoline Range Hydrocarbons	<15.0	1000	706	71	999	678	68	4	70-135	35	L	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	814	81	999	784	78	4	70-135	35		

Relative Percent Difference RPD = $200^{+}[(C-F)/(C+F)]$ Blank Spike Recovery [D] = $100^{+}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{+}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: Amenome Battery



Work Order #: 426797						Project II) :					
Lab Batch ID: 869210 Date Analyzed: 09/03/2011	QC- Sample ID: Date Prepared:	426978 09/02/2	-002 S .011	Bat An:	tch #: alyst:	l Matrix ASA	k: Soil					
Reporting Units: mg/kg	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag	
Analytes	Result [A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD		
Benzene	<0.000998	0.0998	0 0798	80	0 100	0 0718	72	11	70-130	35		
Toluene	<0 00200	0.0998	0 0665	67	0 100	0.0580	58	14	70-130	35	X	
Ethylbenzene	<0.000998	0 0998	0.0641	64	0.100	0 0520	52	21	71-129	35	X	
m_p-Xylenes	<0 00200	0.200	0 123	62	0.200	0.0983	49	22	70-135	35	X	
o-Xylene	<0 000998	0.0998	0.0543	54	0 100	0.0438	44	21	71-133	35	X	
Lab Batch ID: 869326 Date Analyzed: 09/03/2011	QC- Sample ID: Date Prepared:	426704 : 09/01/2	001 S 2011	Ba An	tch #: alyst:	1 Matri : BBH	x: Soil					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY			
TPH By SW8015B Mod	Parent Sample Result	Spike	Spiked Sample Result	Spiked Sample %R	Spike	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD	Control Limits %R	Control Limits %RPD	Flag	
Analytes	[A]	[B]	10,	[D]	[E]	ittsun [.]	[G]	/0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	/0101 02		
C6-C10 Gasoline Range Hydrocarbons	<16 3	1090	810	74	1080	762	71	6	70-135	35		
C10-C28 Diesel Range Hydrocarbons	<16.3	1090	988	91	1080	895	83	10	70-135	35		

Matax Spike Percent Recovery $[D] = 100^{+}(C-A)/B$ Relative Percent Difference RPD = $200^{+}[(C-F)/(C+F)]$ Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: Amenome Battery

Work Order #: 426797

Lab Batch #: 868917		Project ID:										
Date Analyzed: 08/31/2011 15.55	Date Prepared: 08/31/20	11 Ans	ilyst:BRB									
QC- Sample ID: 426801-003 D	Batch #: 1	Ma	trix: Soil									
Reporting Units: %	SAMPLI	E/SAMPLE	DUPLIC	ATE REC	OVERY							
Percent Moisture	Parent Samp Result [A]	le Sample Duplicate Result	RPD	Control Limits %RPD	Flag							
Analyte		[B]		!								
Percent Moisture	<1.00	<1.00	0	20								

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes BRL - Below Reporting Limit

XEN	VCO										С	HA	IN O	F C	US	год	YR	EC	OR	D A	ND	AN	AL	YSI	s r	EQL	IES	T					
								1	1260 Ode)0 W ssa,	est I Tex	1-20 .as 7	East 7976	t 5								1	Pho Fa:	ne. x:	432 432	-563 -563	-18 -17	00 13					
	Project Manager	Amanda Trujillo											<u></u>				Pr	ojec	t Na	ime:	·				Am	enor	ne f	Batt	ery				
	Company Name	Yates Petroleum Cor	poration															P	roje	ct #:	:												
	Company Address	: 105 South 4th Street				-											ſ	Proj	ect	Loc:	:												
	City/State/Zip ⁻	Artesia, NM 88210																	P	0 #:	120	693											
	Telephone No:	575-74	3-4310			Fax No [.]		575-	748	4585	5					R	epor	t Fo	orma	ıt:	x	Sta	Inda	ird		- <u> </u>	TRR	 ≀P		 r		ES	-
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CO2 CO2	FIE	ELD CODE West Middle East	A Contraction of the second se	4.5" 4.5"	9 0 0 0 0 0 0 0 0 0 0 0 0 0	9:30 AM 9:30 AM 9:30 AM	Field Filtered	Total# of Containers	ao T X X X	° c			Na,55,03		Other (Specify)	DW=Drinking Water SL=Sludge	O O O GW = Groundwater S=Salf/Salta TT	X X X TPH 4181 8015M 8015E	TPH TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals. As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	X X BTEX 8021B/5030 or BTEX 8260	RCI	Z O R M	X X Chilondes		I I I I I I I I I I I I I I I I I I I		
Special Relinquis	Instructions:	Please put	each wel	l locati	ion in separa	te report		1							Da	te		Tin	he	La Sa VC La Cu	bora mple DCs bels	atory e Co Free on c y se	/ Co intail of I contail	imm ners Heac ainei on c	ients Intá dspa r(s)	i: ict? .ce?	 s)		- Coo ()	3000	2 Z Z Z		
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XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

.

Client:	laks f	ctraleum
Date/Time:	8:51.1	10.00
Lab ID # :	42	10797/426798
Initials:		<u>Q</u> E

Sample Receipt Checklist

1. Samples on ice?	Blue	Water)	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Yes)	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Des	No		
14. Sufficient sample amount for indicated test(s)?	Tes	No		
15. All samples received within sufficient hold time?	(Tes	No		
16. Subcontract of sample(s)?	Yes	No	NÀ	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No.	•	Cooler 5 No.	
lbs /.5 °C lbs °C lbs °C	lbs	°C	lbs	°c

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:							
Regarding:									
Corrective Action Taken:									
Check all that apply:	□ Cooling process has begun shortly a condition acceptable by NELAC □ Initial and Backup Temperature confi □ Client understands and would like to	ter sampling event and out of temperature 5.5.8.3.1.a.1. m out of temperature conditions proceed with analysis							

lient understands and would like to proceed with analysis

Analytical Report 426798

for Yates Petroleum Corporation

Project Manager: Amanda Trujillo

Amenome Battery

08-SEP-11

Collected By: Client



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



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Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002) Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054) New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610) Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco Tucson (EPA Lab code: AZ00989): Arizona (AZ0758)



08-SEP-11



Project Manager: **Amanda Trujillo** Yates Petroleum Corporation 105 South Fourth St. Artesia, NM 88210

Reference: XENCO Report No: 426798 Amenome Battery Project Address:

Amanda Trujillo:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 426798. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 426798 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II Odessa Laboratory Manager

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Sample Cross Reference 426798

Yates Petroleum Corporation, Artesia, NM

Amenome Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
West	S	08-30-11 09:30	3 - 3.5 ft	426798-001
Middle	S	08-30-11 09:30	2 - 2.5 ft	426798-002
East	S	08-30-11 09:30	4 - 4.5 ft	426798-003



CASE NARRATIVE

Client Name: Yates Petroleum Corporation Project Name: Amenome Battery



Project ID: Work Order Number: 426798 Report Date: 08-SEP-11 Date Received: 08/31/2011

Sample receipt non conformances and comments: None

Sample receipt non conformances and comments per sample:

None



Chloride

Percent Moisture

Project Id:

Contact: Amanda Trujillo

Anions by E300

Percent Moisture

Certificate of Analysis Summary 426798

Yates Petroleum Corporation, Artesia, NM

Project Name: Amenome Battery

SOIL

Aug-30-11 09:30

Sep-01-11 08.19

167

Aug-31-11 15:55

RL

8 5 5

RL

1.00

mg/kg

%

1.79

East

SOIL

Aug-30-11 09:30

Sep-01-11 08:19

47.4

Aug-31-11 15.55

1.84

RL

4.28

RL

1.00

mg/kg

%



Date Received in Lab: Wed Aug-31-11 10:00 am Report Date: 08-SEP-11

Project Location: Lab Id: 426798-001 426798-002 426798-003 Field Id: West Middle Analysis Requested Depth: 3-35 ft 2-2.5 ft 4-4.5 ft

Matrix:

Sampled:

Extracted: Analyzed:

Units/RL:

Extracted: Analyzed:

Units/RL:

SOIL

Aug-30-11 09 30

Sep-01-11 08:19

382

Aug-31-11 15:55

RL

9 02

RL

1 00

mg/kg

%

6 83

- - -

Project Manager: Brent Barron II

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin Ainerica - Odessa - Corpus Christi

Brent Barron II

Odessa Laboratory Manager

Final 1.000



Flagging Criteria

- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- **B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- **D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- **E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the quantitation limit and above the detection limit.
- ${\bf U}~$ Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K Sample analyzed outside of recommended hold time.
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit	SDL Sample Detection Limit	LOD Limit of Detection
PQL Practical Quantitation Limit	MQL Method Quantitation Limit	LOQ Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

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Certified and approved by numerous States and Agencies. A Small Business and Minority Status Company that delivers SERVICE and QUALITY Houston - Dallas - San Antonio - Atlanta - Midland/Odessa - Tampa/Lakeland - Miami - Phoenix - Latin America

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BS / BSD Recoveries



Project Name: Amenome Battery

Work Order #: 426798 Analyst: BRB		Date Prepared: 09/01/2011						Project ID: Date Analyzed: 09/01/2011							
Lab Batch ID: 869030	Sample: 869030-1-BK	(S	Batel	h #: 1		Matrix: Solid									
Units: mg/kg			BLAN	K /BLANK S	PIKE / B	BLANK S	PIKE DUPI	ICATE	RECOVE	ERY STUD	Y				
Anions by E Analytes	E300 s	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R {D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag			
Chloride		<0.840	20 0	22 6	113	20 0	22.4	112	1	75-125	20				

Relative Percent Difference RPD = $200^{*}|(C-F)/(C+F)|$ Blank Spike Recovery [D] = $100^{*}(C)/[B]$ Blank Spike Duplicate Recovery [G] = $100^{*}(F)/[E]$ All results are based on MDL and Validated for QC Purposes



Form 3 - MS Recoveries



Project Name: Amenome Battery

Work Order #: 426798 Lab Batch #: 869030 Date Analyzed: 09/01/2011 QC- Sample ID: 426798-001 S

Date Prepared: 09/01/2011

Analyst: BRB Matrix: Soil

Project ID:

Batch #: 1 MATDIY / MATDIX SPIKE DECOVEDV STUDY

Reporting Units: mg/kg	WAIRIA / WAIRIA SPIKE RECOVER I STUDI												
Inorganic Anions by EPA 300 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag							
Chlorida	387	215	647	123	75-125								

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative Percent Difference [E] = 200*(C-A)/(C+B)All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit



Sample Duplicate Recovery



Project Name: Amenome Battery

Work	Order #:	426798
------	----------	--------

Lab Batch #: 869030				Project I	D:	
Date Analyzed: 09/01/20)11 08:19 I	Date Prepared: 09/01/2	2011 Ana	lyst: BRB		
QC- Sample ID: 426798-	001 D	Batch #: 1	Ma	trix: Soil		
Reporting Units: mg/kg		SAMPI	LE / SAMPLE	DUPLIC	ATE REC	OVERY
Anion	s by E300 nalyte	Parent San Result [A]	iple Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	······································	382	387	1	20	
Lab Batch #: 868917	n yn gener yn ar hefer yn de fan y Yn de fan de f				it in a constant of the second	istila ilaineen aan
Date Analyzed: 08/31/20	111 15:55 D	Date Prepared: 08/31/2	2011 Ana	lyst:BRB		
QC- Sample ID: 426801-	003 D	Batch #: 1	Mat	t rix: Soil		
Reporting Units: %		SAMPI	LE / SAMPLE	DUPLIC	ATE REC	OVERY
Percent	t Moisture 1alyte	Parent Sam Result [A]	iple Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture		<1.00	<1.00	0	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) | All Results are based on MDL and validated for QC purposes BRL - Below Reporting Limit

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Standard TAT

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	Company Name	Yales Petrole	um Corporat	เดก										<u> </u>						Pro	oject	#:												
	Company Address:	105 South 4th	Street			***													Ρ	roje	ct Lo	oc: _				_								
	City/State/Zip	Artesia, NM	88210																		РО	#: 1	269	3							-			
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	Sampler Signature:					<u></u>	e-mail:	-			atr	uiil	106	Dva	ites	pet	 rol	eun	1.0	om		_					_							
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AB # (lab use only)	FIEI	LD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	-leid Filtered	fotal # of Containers	lce	HN03	HCI	H ₂ SO.	NaOH	Na ₂ S ₇ O ₃	None	Ouner (specify)	GW = Groundwater S=Soil/Solid	NP=Non-Polable Specify Other	TPH: 4181 8015M 8	TPH TX 1005 TX 100	Cations (Ca, Mg, Na, K)	Anions (CI, SO4, Alkalinity)	SAR / ESP / CEC	Metals. As Ag Ba Cd Cr Pb H	Volatiles	Semivolatiles	日TEX 80218/5030 Of B1⊭入 d D^1	MAC N	Chlorides	TLCP		KUSH I.A.I. (Pre-Schedule) 24	Displand TAT
001		West		3'	3.5"	8/30/2011	9:30 AM			x								S		x		1	1			-	-	x	1	×				2
002	Ň	Aiddle		2'	2.5"	8/30/2011	9:30 AM			x								S		x								x		×				2
003		East		4'	4.5"	8/30/2011	9:30 AM			x				_			_	S		x							_	x		x	\square	┝╼╄╴	-	2
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Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa Document Title: Sample Receipt Checklist Document No.. SYS-SRC Revision/Date: No 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

,

Client:	Yaks F	etroleum	
Date/Time:	8.51-1	10.00	
Lab ID # :	47	16797/426798	
Initials:		98	

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	(Tes)	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	No		
7. Chain of custody signed when relinquished / received?	(tes)	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No ·		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	æs	No		
14. Sufficient sample amount for indicated test(s)?	Tes	No		
15. All samples received within sufficient hold time?	শেট্ট	No		
16. Subcontract of sample(s)?	Yes	No	NÀ	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No		Cooler 5 No.	
lbs /.5 °C lbs °C lbs °C	lbs	°C	ibs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:	
Regarding:			
Correctius Astion Tak			
	en:		
Check all that apply:	□Cooling process has begun shortly after sa condition acceptable by NELAC 5.5.8	mpling event and out of temperature	<u></u>

□Initial and Backup Temperature confirm out of temperature conditions

Client understands and would like to proceed with analysis