

Medano Waterline Release 12/21/2010



High Pressure Gas Line (Devon)

5'

50'

5'

100'

5'

200'

Pipeline French

Pooling Area (PA)

	TPH	BTEX
8" BGS	4231	16.45
4' BGS	855.2	1.422

50' from PA  
TPH    BTEX

Sidewall	18.9	ND
Bottom 6'	7830	42.41

YPC Waterline

100' from PA  
TPH    BTEX

Bottom 6'	50.6	0.317
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200' from PA  
TPH    BTEX

Bottom 6'	18.9	ND
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January 14, 2011

AMANDA TRUJILLO

Yates Energy Petroleum Corp

105 S 4th Street

Artesia, NM 88210

RE: MEDANO WATERLINE

Enclosed are the results of analyses for samples received by the laboratory on 01/07/11 14:00.

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 Hydrocarbons

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

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 (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. 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:	01/07/2011	Sampling Date:	01/04/2011
Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: POOLING AREA 8" (H100046-01)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	01/13/2011	ND	1.63	81.4	2.00	11.4		
Toluene*	<b>2.29</b>	0.200	01/13/2011	ND	1.79	89.6	2.00	10.9		
Ethylbenzene*	<b>2.36</b>	0.200	01/13/2011	ND	2.03	102	2.00	10.8		
<b>Total Xylenes*</b>	<b>11.8</b>	0.600	01/13/2011	ND	6.32	105	6.00	11.1		

Surrogate 4-Bromofluorobenzene (PIL) 88.5% 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>10400</b>	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<b>651</b>	100	01/11/2011	ND	250	100	250	4.12		
DRO >C10-C28	<b>3580</b>	100	01/11/2011	ND	238	95.1	250	3.38		

Surrogate 1-Chlorooctane 114% 70-130

Surrogate: 1-Chlorooctadecane 95.4% 70-130

Cardinal Laboratories

\*=Accredited Analyte

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 Fax To: (505) 748-4635

Received:	01/07/2011	Sampling Date:	01/04/2011
Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: POOLING AREA 4' (H100046-02)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/12/2011	ND	1.72	86.1	2.00	5.22		
Toluene*	<b>0.098</b>	0.050	01/12/2011	ND	1.83	91.5	2.00	2.75		
Ethylbenzene*	<b>0.134</b>	0.050	01/12/2011	ND	2.03	102	2.00	0.932		
Total Xylenes*	<b>1.19</b>	0.150	01/12/2011	ND	6.32	105	6.00	0.155		

Surrogate: 4-Bromofluorobenzene (PIL) 111 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>8400</b>	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<b>33.2</b>	10.0	01/11/2011	ND	250	100	250	4.12		
DRO >C10-C28	<b>822</b>	10.0	01/11/2011	ND	238	95.1	250	3.38		

Surrogate: 1-Chlorooctane 92.1 % 70-130

Surrogate: 1-Chlorooctadecane 87.8 % 70-130

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Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: 50' FROM PA SIDEWALL (H100046-03)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/12/2011	ND	1.72	86.1	2.00	5.22		
Toluene*	<0.050	0.050	01/12/2011	ND	1.83	91.5	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/12/2011	ND	2.03	102	2.00	0.932		
Total Xylenes*	<0.150	0.150	01/12/2011	ND	6.32	105	6.00	0.155		

Surrogate 4-Bromofluorobenzene (PIL) 111 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5700	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/11/2011	ND	250	100	250	4.12		
DRO >C10-C28	18.9	10.0	01/11/2011	ND	238	95.1	250	3.38		

Surrogate: 1-Chlorooctane 87.1 % 70-130

Surrogate: 1-Chloroadecane 97.8 % 70-130

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 Fax To: (505) 748-4635

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Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: 50' FROM PA BOTTOM 6' (H100046-04)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/13/2011	ND	1.63	81.4	2.00	11.4		
Toluene*	<b>6.88</b>	0.500	01/13/2011	ND	1.79	89.6	2.00	10.9		
Ethylbenzene*	<b>5.13</b>	0.500	01/13/2011	ND	2.03	102	2.00	10.8		
Total Xylenes*	<b>30.4</b>	1.50	01/13/2011	ND	6.32	105	6.00	11.1		

Surrogate: 4-Bromofluorobenzene (PIL) 62.5 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>5360</b>	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB							S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier		
GRO C6-C10	<b>1430</b>	100	01/11/2011	ND	250	100	250	4.12			
DRO >C10-C28	<b>6400</b>	100	01/11/2011	ND	238	95.1	250	3.38			

Surrogate: 1-Chlorooctane 137 % 70-130

Surrogate: 1-Chlorooctadecane 95.1 % 70-130

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Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: 100' FROM PA BOTTOM 6' (H100046-05)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/12/2011	ND	1.72	86.1	2.00	5.22		
Toluene*	<0.050	0.050	01/12/2011	ND	1.83	91.5	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/12/2011	ND	2.03	102	2.00	0.932		
<b>Total Xylenes*</b>	<b>0.317</b>	0.150	01/12/2011	ND	6.32	105	6.00	0.155		

*Surrogate 4-Bromofluorobenzene (PIL) 117% 70-130*

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>8000</b>	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/11/2011	ND	250	100	250	4.12		
<b>DRO &gt;C10-C28</b>	<b>50.6</b>	10.0	01/11/2011	ND	238	95.1	250	3.38		

*Surrogate 1-Chlorooctane 91.6% 70-130*

*Surrogate 1-Chlorooctadecane 102% 70-130*



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Received:	01/07/2011	Sampling Date:	01/04/2011
Reported:	01/14/2011	Sampling Type:	Soil
Project Name:	MEDANO WATERLINE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		

**Sample ID: 200' FROM PA BOTTOM 6' (H100046-06)**

BTEX 8021B		mg/kg		Analyzed By: CMS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/12/2011	ND	1.72	86.1	2.00	5.22		
Toluene*	<0.050	0.050	01/12/2011	ND	1.83	91.5	2.00	2.75		
Ethylbenzene*	<0.050	0.050	01/12/2011	ND	2.03	102	2.00	0.932		
Total Xylenes*	<0.150	0.150	01/12/2011	ND	6.32	105	6.00	0.155		

Surrogate 4-Bromofluorobenzene (PIL) 108 % 70-130

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6200	16.0	01/10/2011	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: AB						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	01/12/2011	ND	250	100	250	4.12		
DRO >C10-C28	18.9	10.0	01/12/2011	ND	238	95.1	250	3.38		

Surrogate 1-Chlorooctane 92.8 % 70-130

Surrogate 1-Chlorooctadecane 105 % 70-130



### Notes and Definitions

- S-LOW Low surrogate recovery confirmed as a matrix effect by a second analysis.
- 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



# SAFE WORK PERMIT

AGAVE ENERGY COMPANY

Facility/Location: Madama H2O Live Cleanup  
**"TAIL-GATE" SAFETY MEETING FORM**  
 FOR ROUTINE JOBS  
 Not to be used for Critical Task Analysis!  
 (See instructions on reverse side)

Complete PPE list as determined by completing Job Review

Respiratory										Gloves			Cloth						
HARD HAT	SAFETY GLASSES with SIDE SHIELDS	FACESHIELD	EAR PROTECTION	GOGGLES	FALL PROTECTION	DUST, FUME (HEPA)	ORGANIC VAPOR	RADIONUCLIDE	NUISANCE-DUST	SUPPLIED AIR	THERMAL	LEATHER	NITRILE 22 MIL	NEOPRENE	COTTON	OTHER	TYVEK	FR CLOTHING	SAFETY/STEEL TOES
												X							

Date: 2-25-11

\*If OTHER - List here:

What is the job? Hydro Vac Cement at Job

List the hazards of the Job:

List steps and solutions for hazards (ex. PPE, Communication, Monitors, etc.)

- 1 Cave in
- 2 Slip in by Hose
- 3 PPE
- 4 Brake hole
- 5 H2O Truck
- 6 4" Gas Line
- 7 2" B 195
- 8 Slip trips & Fall

- 1 Stay out of OTCN shoe pan if needed
- 2 Attach next in p
- 3 Jam in
- 4 Be Alert Cement Vest
- 5 Be Alert Cement Vest
- 6 Use Cell Stay away from Devs
- 7 Watch all TYP
- 8 Go slow with us slo

Does this Job require a Permit? Div. is a lock

Circle all applicable permits below. Hot Work LOCKOUT/TAGOUT Excavation Written Procedure - Circle; Yes No (If NO - write procedure)

What Special tool(s) or equipment is/are required? H2O

Name of Lock/Tag Location of Lock/Tag

Examples: Crane, Come-a-long, Blinds, Etc.

Inspection of slings, equipment performed? Check when completed: Hook, Sp, Nostr, & Below

- 1 Yacht
- 2
- 3
- 4
- 5
- 6

Permits: 1) Hot Work Permits 2) Confined Space Permit 3) Critical Lift 4) Excavation 5) Safety & Emergency System Bypass

## Bratcher, Mike, EMNRD

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**From:** Amanda Trujillo [atrujillo@yatespetroleum.com]  
**Sent:** Monday, March 14, 2011 10:39 AM  
**To:** Bratcher, Mike, EMNRD  
**Subject:** RE: Medano Water Line

Directions – Hyw 128 east, toward Jal. Turn North just before mile marker 14 on lease road but after Twin wells road. Follow lease road for 0.1 mile. Turn left (east) and follow road for 0.3 mile. Site is on the right hand side of the road. There is location near by named “*Pure Gold*”. I don’t know who operates it but if you get to the well site you have gone to far.

Amanda N. Trujillo  
Environmental Scientist  
Yates Petroleum Corporation  
Office 575-748-4310  
Cell 575-703-6537  
Email [atrujillo@yatespetroleum.com](mailto:atrujillo@yatespetroleum.com)

-----Original Message-----

**From:** Bratcher, Mike, EMNRD [<mailto:mike.bratcher@state.nm.us>]  
**Sent:** Monday, March 14, 2011 9:42 AM  
**To:** Amanda Trujillo  
**Subject:** Medano Water Line

Amanda,

Do you have driving directions for this release site? If not, just the Unit letter would help. I would like to visit the site as part of the review of your closure request.

Thanks,

*Mike Bratcher*

NMOCD DISTRICT 2  
1301 W. GRAND AVE.  
ARTESIA, NM 88210  
575-748-1283 EXT.108  
[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)