



November 11, 2013

AMBER CANNON  
YATES PETROLEUM CORPORATION  
105 S 4th Street  
Artesia, NM 88210

RE: LIVINGSTON RIDGE SWD WATER LINE

Enclosed are the results of analyses for samples received by the laboratory on 11/06/13 13:00.

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/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/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,

A handwritten signature in cursive script that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-2 (H302701-01)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/08/2013	ND	2.02	101	2.00	0.0983		
Toluene*	<0.050	0.050	11/08/2013	ND	2.01	100	2.00	0.0618		
Ethylbenzene*	<0.050	0.050	11/08/2013	ND	2.01	101	2.00	0.0369		
Total Xylenes*	<0.150	0.150	11/08/2013	ND	5.90	98.4	6.00	0.540		
Total BTEX	<0.300	0.300	11/08/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81		
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8		

Surrogate: 1-Chlorooctane 77.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 81.4 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

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Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-4 (H302701-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/08/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/08/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/08/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/08/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/08/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 81.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.1 % 63.6-154

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Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-6 (H302701-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/08/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/08/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/08/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/08/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/08/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 89.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 89.6 % 63.6-154

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Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-8 (H302701-04)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/08/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/08/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/08/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/08/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/08/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 105 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-10 (H302701-05)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 99.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-12 (H302701-06)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 87.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 87.1 % 63.6-154

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Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-14 (H302701-07)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 107 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 1-16 (H302701-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 98.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.9 % 63.6-154

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Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-2 (H302701-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/06/2013	ND	198	98.8	200	1.81	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	224	112	200	17.8	

Surrogate: 1-Chlorooctane 98.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.1 % 63.6-154

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Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-4 (H302701-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 108 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-6 (H302701-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 73.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 83.2 % 63.6-154

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**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-8 (H302701-12)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	2.02	101	2.00	0.0983	
Toluene*	<0.050	0.050	11/09/2013	ND	2.01	100	2.00	0.0618	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	2.01	101	2.00	0.0369	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.90	98.4	6.00	0.540	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 103 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-10 (H302701-13)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18	
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94	
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11	
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70	
Total BTEX	<0.300	0.300	11/10/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 101 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

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 AMBER CANNON  
 105 S 4th Street  
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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-12 (H302701-14)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 94.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.9 % 63.6-154

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Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 2-14 (H302701-15)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/06/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/06/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 94.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.6 % 63.6-154

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 105 S 4th Street  
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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-2 (H302701-16)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 78.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 82.0 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-4 (H302701-17)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 98.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-6 (H302701-18)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 109 % 63.6-154

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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-8 (H302701-19)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 104 % 65.2-140

Surrogate: 1-Chlorooctadecane 111 % 63.6-154

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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-10 (H302701-20)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 96.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-12 (H302701-21)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 91.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.0 % 63.6-154

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**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-14 (H302701-22)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 98.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 63.6-154

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**Analytical Results For:**

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 3-16 (H302701-23)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/08/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/08/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 91.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

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 105 S 4th Street  
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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-2 (H302701-24)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 86.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 89.8 % 63.6-154

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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-4 (H302701-25)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 97.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-6 (H302701-26)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 90.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.8 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-8 (H302701-27)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 95.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 105 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-10 (H302701-28)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29	

Surrogate: 1-Chlorooctane 91.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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 AMBER CANNON  
 105 S 4th Street  
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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-12 (H302701-29)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	192	96.1	200	1.93		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	191	95.5	200	1.29		

Surrogate: 1-Chlorooctane 65.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 68.4 % 63.6-154

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 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-14 (H302701-30)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41	

Surrogate: 1-Chlorooctane 99.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 4-16 (H302701-31)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84	
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58	
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28	
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69	
Total BTEX	<0.300	0.300	11/09/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41	

Surrogate: 1-Chlorooctane 113 % 65.2-140

Surrogate: 1-Chlorooctadecane 120 % 63.6-154

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**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-2 (H302701-32)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/09/2013	ND	1.86	92.9	2.00	2.84		
Toluene*	<0.050	0.050	11/09/2013	ND	1.87	93.4	2.00	2.58		
Ethylbenzene*	<0.050	0.050	11/09/2013	ND	1.89	94.6	2.00	2.28		
Total Xylenes*	<0.150	0.150	11/09/2013	ND	5.57	92.8	6.00	1.69		
Total BTEX	<0.300	0.300	11/09/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41		

Surrogate: 1-Chlorooctane 95.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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**Analytical Results For:**

 YATES PETROLEUM CORPORATION  
 AMBER CANNON  
 105 S 4th Street  
 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-4 (H302701-33)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18		
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94		
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11		
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70		
Total BTEX	<0.300	0.300	11/10/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41		

Surrogate: 1-Chlorooctane 97.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 110 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-6 (H302701-34)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18	
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94	
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11	
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70	
Total BTEX	<0.300	0.300	11/10/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41	

Surrogate: 1-Chlorooctane 92.6 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-8 (H302701-35)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18		
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94		
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11		
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70		
Total BTEX	<0.300	0.300	11/10/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41		

Surrogate: 1-Chlorooctane 90.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.5 % 63.6-154

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**Analytical Results For:**

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-10 (H302701-36)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18	
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94	
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11	
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70	
Total BTEX	<0.300	0.300	11/10/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41	

Surrogate: 1-Chlorooctane 96.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-12 (H302701-37)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18	
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94	
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11	
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70	
Total BTEX	<0.300	0.300	11/10/2013	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99	
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41	

Surrogate: 1-Chlorooctane 96.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.4 % 63.6-154

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

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-14 (H302701-38)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18		
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94		
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11		
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70		
Total BTEX	<0.300	0.300	11/10/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41		

Surrogate: 1-Chlorooctane 91.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.1 % 63.6-154

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 Artesia NM, 88210  
 Fax To: (505) 748-4635

Received:	11/06/2013	Sampling Date:	11/04/2013
Reported:	11/11/2013	Sampling Type:	Soil
Project Name:	LIVINGSTON RIDGE SWD WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	103-2020	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: LR 5-16 (H302701-39)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2013	ND	1.96	97.9	2.00	2.18		
Toluene*	<0.050	0.050	11/10/2013	ND	1.97	98.6	2.00	2.94		
Ethylbenzene*	<0.050	0.050	11/10/2013	ND	1.99	99.7	2.00	3.11		
Total Xylenes*	<0.150	0.150	11/10/2013	ND	5.89	98.2	6.00	3.70		
Total BTEX	<0.300	0.300	11/10/2013	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 89.4-126

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	11/07/2013	ND	210	105	200	6.99		
DRO >C10-C28	<10.0	10.0	11/07/2013	ND	204	102	200	3.41		

Surrogate: 1-Chlorooctane 91.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 104 % 63.6-154

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**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









