

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/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.

Celey D. Keene

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



YATES 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)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10300	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-4 (H30	2701-02)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	21200	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-6 (H30	2701-03)								
Chloride, SM4500Cl-B	mg,	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	29600	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-8 (H30	2701-04)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16200	16.0	11/07/2013	ND	432	108	400	4.01	

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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 1-10 (H302701-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10000	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-12 (H30	02701-06)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	18000	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-14 (H30	02701-07)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16000	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 1-16 (H30	02701-08)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14400	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 2-2 (H302	2701-09)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14600	16.0	11/07/2013	ND	432	108	400	4.01	

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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

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14000	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 2-6 (H30)2701-11)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10800	16.0	11/07/2013	ND	432	108	400	4.01	
Sample ID: LR 2-8 (H30	2701-12)								
•)2701-12) mg,	/kg	Analyze	d By: AP					
•	•	/kg Reporting Limit	Analyze Analyzed	d By: AP Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sample ID: LR 2-8 (H30 Chloride, SM4500Cl-B Analyte Chloride	mg,			•	BS 416	% Recovery	True Value QC 400	RPD 3.92	Qualifier
Chloride, SM4500CI-B Analyte	mg, Result 12200	Reporting Limit	Analyzed	Method Blank		•			Qualifier
Chloride, SM4500Cl-B Analyte Chloride	mg, Result 12200	Reporting Limit	Analyzed 11/08/2013	Method Blank		•			Qualifier
Analyte Chloride Sample ID: LR 2-10 (H3	mg, Result 12200 802701-13)	Reporting Limit	Analyzed 11/08/2013	Method Blank ND		•			Qualifier Qualifier

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

Chloride, SM4500Cl-B	, mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20200	16.0	11/08/2013	ND	416	104	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager



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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)

mg/	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
15400	16.0	11/08/2013	ND	416	104	400	3.92	
01-16)								
mg,	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
6260	16.0	11/08/2013	ND	416	104	400	3.92	
01-17)								
mg į	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
11200	16.0	11/08/2013	ND	416	104	400	3.92	
01-18)								
mg /	/kg	Analyze	d By: AP					
Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
25200	16.0	11/08/2013	ND	416	104	400	3.92	
(01-19)								
(01-19) mg,	/kg	Analyze	d By: AP					
•	/kg Reporting Limit	Analyze Analyzed	d By: AP Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
,	Result 15400 (01-16) Result 6260 (01-17) Result 11200 (01-18) Result 25200	mg/kg Result Reporting Limit 15400 16.0 Political Limit 6260 16.0 Political Limit 11200 16.0 Political Limit 11200 Political Limit Result Reporting Limit 1200 16.0 16.0 Political Limit Result Reporting Limit 25200 16.0 16.0	mg/kg Analyze Result Reporting Limit Analyzed 15400 16.0 11/08/2013 701-16) mg/kg Analyze Result Reporting Limit Analyzed 6260 16.0 11/08/2013 701-17) mg/kg Analyze Result Reporting Limit Analyzed 11200 16.0 11/08/2013 701-18) mg/kg Analyze Result Reporting Limit Analyze Result Reporting Limit Analyze 25200 16.0 11/08/2013	mg/kg Analyzed By: AP Result Reporting Limit Analyzed Method Blank 15400 16.0 11/08/2013 ND 701-16) mg/kg Analyzed By: AP Result Reporting Limit Analyzed By: AP Result Reporting Limit Analyzed By: AP Pol-18) mg/kg Analyzed By: AP Result Reporting Limit Analyzed By: AP	Result Reporting Limit Analyzed Method Blank BS	Result Reporting Limit Analyzed Method Blank BS % Recovery 15400 16.0 11/08/2013 ND 416 104 701-16) mg/kg Analyzed By: AP Result Reporting Limit Analyzed By: AP Result Reporting Limit Analyzed By: AP Result Reporting Limit Analyzed By: AP 701-18) mg/kg Analyzed By: AP Result Reporting Limit Analyzed By: AP Result Reporting Limit Analyzed Method Blank BS % Recovery 25200 16.0 11/08/2013 ND 416 104	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC	Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD

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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 3-10 (H302701-20)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13200	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 3-12 (H30	2701-21)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12200	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 3-14 (H30	2701-22)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19000	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 3-16 (H30	2701-23)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12600	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 4-2 (H302	701-24)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22200	16.0	11/08/2013	ND	416	104	400	3.92	

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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)

y True Value QC 400 y True Value QC 400 y True Value QC 400	RPD 3.92 RPD 3.92	Qualifier Qualifier Qualifier
y True Value QC 400 Y True Value QC	RPD 3.92	
400 Y True Value QC	3.92 RPD	
400 Y True Value QC	3.92 RPD	
400 Y True Value QC	3.92 RPD	
y True Value QC	RPD	Qualifier
-		Qualifier
-		Qualifier
-		Qualifier
400	3.92	
Y True Value QC	RPD	Qualifier
400	3.92	
y True Value QC	RPD	Qualifier
400	3.92	
	400	400 3.92 y True Value QC RPD

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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)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26000	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 4-16 (H3	02701-31)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22600	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-2 (H30	2701-32)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11400	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-4 (H30	2701-33)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17000	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-6 (H30	2701-34)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	29200	16.0	11/08/2013	ND	416	104	400	3.92	

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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 5-8 (H302701-35)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14800	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-10 (H30	02701-36)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15800	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-12 (H30	02701-37)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14600	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-14 (H30	02701-38)								
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19400	16.0	11/08/2013	ND	416	104	400	3.92	
Sample ID: LR 5-16 (H30	02701-39)								
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	25600	16.0	11/08/2013	ND	416	104	400	3.92	
			, ,						

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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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ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240

	Relinquished by:	Relinquished by:		Special instructions	7 LR 1-16	니 LR 1-14	6 LR 1-12	ル LR 1-10	U LR 1-8	3 LR 1-6	2 LR 1-4	LR 1-2	LAB # (lab use only)	ORDER#: /	(lab use only)		Sample	Telephone No:	City/State/Zip:	Compa	Compa	Project	Se Se	种
		Canron					2						FIELD CODE	H302101	Š		Sampler Signature: (Umb		ite/Zip: Artesia, NM 88210	Company Address: 105 South 4th Street	Company Name Yates Petrole	Project Manager: Amber Cannon	ARDINAL LABORATORIES 101 East Mariand, Hobbs, NM 88240	
	Date	MW Bate		IPH: 8015B, BTEX: 8021B. separate report. Thank vo													u Ca	575-748-4111 or 575-513-8799	88210	h Street	Yates Petroleum Corporation	on	S M 88240	
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	91	Menson		Please show BTEX results	11:06 AM	11:00 AM	10:54 AM	10:50 AM	10:46 AM	10:41 AM	10:38 AM	10:34 AM	Time Sampled				e-mail:	Fax No:					FAX (505) 393-	va 1
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		12		as mg/kg.	×	×	×	×	×	×	×	×	Ice	\Box			acannon@ya	575-748-4131				1		
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