



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

April 28, 2015

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: DAYTON WATER LINE

Enclosed are the results of analyses for samples received by the laboratory on 04/24/15 12:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

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

Received: 04/24/2015  
Reported: 04/28/2015  
Project Name: DAYTON WATER LINE  
Project Number: 205-0750  
Project Location: GUSHWA DX #1

Sampling Date: 04/22/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: S1- 10' (H501074-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7040	16.0	04/28/2015	ND	416	104	400	0.00	

**Sample ID: S1- 11' (H501074-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	04/28/2015	ND	416	104	400	0.00	

**Sample ID: S1- 12' (H501074-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7280	16.0	04/28/2015	ND	416	104	400	0.00	

**Sample ID: S1- 13' (H501074-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7120	16.0	04/28/2015	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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*Coley D. Keene*

Coley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

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

Received:	04/24/2015	Sampling Date:	04/22/2015
Reported:	04/28/2015	Sampling Type:	Soil
Project Name:	DAYTON WATER LINE	Sampling Condition:	Cool & Intact
Project Number:	205-0750	Sample Received By:	Jodi Henson
Project Location:	GUSHWA DX #1		

**Sample ID: S1- 14' (H501074-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5280	16.0	04/28/2015	ND	416	104	400	0.00	

**Sample ID: S1- 15' (H501074-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	04/28/2015	ND	416	104	400	0.00	

**Sample ID: S1- 15.5' (H501074-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2040	16.0	04/28/2015	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

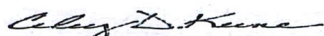
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





ARDINAL LABORATORIES  
101 East Marland, Hobbs, NM 88240

(505) 393-2326 FAX (505) 393-2476

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Company (505) 393-2326 Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Sample Signature:

e-mail: cssettle@yatespetroleum.com

Fax No: 575-748-4131

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

PO #: 205-0750

Project Name: Dayton Water Line (Gushwa DX #)

Project #:

Project Loc: Dayton Water Line (Gushwa DX #1)

LAB # (lab use only)		FIELD CODE		Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers							Matrix	Analyze For																		
LAB #	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable	Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT		
1	S1-10'			4/22/2015	10:45 AM		1								X		S																			
2	S1-11'			4/22/2015	10:55 AM		1								X		S																			
3	S1-12'			4/22/2015	11:05 AM		1								X		S																			
4	S1-13'			4/22/2015	11:15 AM		1								X		S																			
5	S1-14'			4/22/2015	11:25 AM		1								X		S																			
6	S1-15'			4/22/2015	11:35 AM		1								X		S																			
7	S1-15.5'			4/22/2015	11:45 AM		1								X		S																			
Special Instructions:																																				
Reinquisitioned by:	Date	Time	Received by:	Date	Time																															
Reinquisitioned by:	4-24-15	18:45	Chase Settle	4-24-15	18:45																															
Reinquisitioned by:	Date	Time	Received by:	Date	Time																															
Reinquisitioned by:	Date	Time	Received by:	Date	Time																															
Laboratory Comments:																																				
Sample Containers Intact?																																				
VOCs Free of Headspace?																																				
Labels on container(s)																																				
Custody seals on container(s)																																				
Sample Hand Delivered																																				
by Courier? UPS DHL FedEx Lone Star																																				
Temperature Upon Receipt																																				
45.1																																				





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

December 02, 2016

Chase Settle

Yates Petroleum Corporation

105 South Fourth Street

Artesia, NM 88210

TEL: (575) 748-4111

FAX

RE: Dayton Water Line (Gushwa DX #1)

OrderNo.: 1611A07

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/18/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1611A07

Date Reported: 12/2/2016

**CLIENT:** Yates Petroleum Corporation  
**Project:** Dayton Water Line (Gushwa DX #1)

**Lab Order:** 1611A07

**Lab ID:** 1611A07-001

**Collection Date:** 11/15/2016 1:07:00 PM

**Client Sample ID:** S1C-5'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	6800	300		mg/Kg	200	11/29/2016 6:42:17 PM	28874

**Lab ID:** 1611A07-002

**Collection Date:** 11/15/2016 1:10:00 PM

**Client Sample ID:** S1C-10'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1400	75		mg/Kg	50	11/29/2016 6:54:41 PM	28874

**Lab ID:** 1611A07-003

**Collection Date:** 11/15/2016 1:14:00 PM

**Client Sample ID:** S1C-15'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	70	30		mg/Kg	20	11/28/2016 3:01:17 PM	28874

**Lab ID:** 1611A07-004

**Collection Date:** 11/15/2016 1:17:00 PM

**Client Sample ID:** S1C-20'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	11/28/2016 3:13:42 PM	28874

**Lab ID:** 1611A07-005

**Collection Date:** 11/15/2016 1:24:00 PM

**Client Sample ID:** S1C-25'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	11/28/2016 3:26:06 PM	28874

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 1 of 3
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

## Hall Environmental Analysis Laboratory, Inc.

### Analytical Report

Lab Order: 1611A07

Date Reported: 12/2/2016

**CLIENT:** Yates Petroleum Corporation  
**Project:** Dayton Water Line (Gushwa DX #1)

**Lab Order:** 1611A07

**Lab ID:** 1611A07-006

**Collection Date:** 11/15/2016 1:32:00 PM

**Client Sample ID:** S1C-30'

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LGT
Chloride	ND	30		mg/Kg	20	11/28/2016 3:38:30 PM	28874

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	<b>*</b> Value exceeds Maximum Contaminant Level.	<b>B</b> Analyte detected in the associated Method Blank
	<b>D</b> Sample Diluted Due to Matrix	<b>E</b> Value above quantitation range
	<b>H</b> Holding times for preparation or analysis exceeded	<b>J</b> Analyte detected below quantitation limits
	<b>ND</b> Not Detected at the Reporting Limit	<b>P</b> Sample pH Not In Range
	<b>R</b> RPD outside accepted recovery limits	<b>RL</b> Reporting Detection Limit
	<b>S</b> % Recovery outside of range due to dilution or matrix	<b>W</b> Sample container temperature is out of limit as specified



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611A07

02-Dec-16

Client: Yates Petroleum Corporation

Project: Dayton Water Line (Gushwa DX #1)

Sample ID	MB-28874	SampType:	MBLK	TestCode:	EPA Method 300.0: Anlons						
Client ID:	PBS	Batch ID:	28874	RunNo:	39000						
Prep Date:	11/28/2016	Analysis Date:	11/28/2016	SeqNo:	1219737	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-28874	SampType:	LCS	TestCode:	EPA Method 300.0: Anlons						
Client ID:	LCSS	Batch ID:	28874	RunNo:	39000						
Prep Date:	11/28/2016	Analysis Date:	11/28/2016	SeqNo:	1219738	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	90.5	90	110				

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1611A07

RcptNo: 1

Received by/date:

Logged By: Ashley Gallegos

11/18/2016 9:30:00 AM

Completed By: Ashley Gallegos

11/18/2016 11:43:06 AM

Reviewed By: Re

### Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

### Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☐ No ☒ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: \_\_\_\_\_

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	15.0	Good	Yes			

# Chain-of-Custody Record

Client: Yates Petroleum Corporation

Mailing Address:

105 South 4th Street Artesia, NM 88210

Phone #: 575-703-6537

email or Fax#: csettle@yatespetroleum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 15.0

Date Time Matrix Sample Request ID

11/15/2016 1:07p Soil S1C-5'

11/15/2016 1:10p Soil S1C-10'

11/15/2016 1:14p Soil S1C-15'

11/15/2016 1:17p Soil S1C-20'

11/15/2016 1:24p Soil S1C-25'

11/15/2016 1:32p Soil S1C-30'

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Dayton Water Line (Gushwa DX #1)

Project #:

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 15.0

Container Type and #

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

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1 - 4oz.

1 - 4oz.

Preservative Type

None

None

None

None

None

None

None

None

None

None

None

None

None

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HEAL No

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-030

-031

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Dayton Water Line (Gushwa DX #1)

Project #:

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 15.0

Container Type and #

1 - 4oz.

1 - 4oz.

1 - 4oz.

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1 - 4oz.

1 - 4oz.

Preservative Type

None

None

None

None

None

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None

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HEAL No

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-015

-016

-017

-018

-019

-020

-021

-022

-023

-024

-025

-026

-027

-028

-029

-030

-031

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Dayton Water Line (Gushwa DX #1)

Project #:

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 15.0

Container Type and #

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

1 - 4oz.

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1 - 4oz.

1 - 4oz.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

December 28, 2016

Chase Settle  
EOG Resources  
105 South Fourth Street  
Artesia, NM 88210  
TEL: (575) 748-4111  
FAX

RE: Dayton Water Line (Gushwa DX #1)

OrderNo.: 1612949

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 16 sample(s) on 12/16/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1612949

Date Reported: 12/28/2016

<b>CLIENT:</b>	EOG Resources	<b>Lab Order:</b>	1612949
<b>Project:</b>	Dayton Water Line (Gushwa DX #1)		
<b>Lab ID:</b>	1612949-001	<b>Collection Date:</b>	12/13/2016 10:12:00 AM
<b>Client Sample ID:</b>	S3-1-1'	<b>Matrix:</b>	SOIL
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride	58	30 mg/Kg	20 12/23/2016 12:01:35 PM 29393
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride	32	30 mg/Kg	20 12/23/2016 12:38:49 PM 29393
<b>Lab ID:</b>	1612949-002	<b>Collection Date:</b>	12/13/2016 10:13:00 AM
<b>Client Sample ID:</b>	S3-1-2'	<b>Matrix:</b>	SOIL
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride	68	30 mg/Kg	20 12/23/2016 12:51:14 PM 29393
<b>Lab ID:</b>	1612949-003	<b>Collection Date:</b>	12/13/2016 10:14:00 AM
<b>Client Sample ID:</b>	S3-1-3'	<b>Matrix:</b>	SOIL
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride	1800	75 mg/Kg	50 12/27/2016 8:45:01 PM 29393
<b>Lab ID:</b>	1612949-004	<b>Collection Date:</b>	12/13/2016 10:17:00 AM
<b>Client Sample ID:</b>	S3-1-4'	<b>Matrix:</b>	SOIL
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride	67	30 mg/Kg	20 12/23/2016 1:16:03 PM 29393
<b>Lab ID:</b>	1612949-005	<b>Collection Date:</b>	12/13/2016 10:23:00 AM
<b>Client Sample ID:</b>	S3-2-1'	<b>Matrix:</b>	SOIL
<b>Analyses</b>	<b>Result</b>	<b>PQL Qual Units</b>	<b>DF Date Analyzed Batch ID</b>
<b>EPA METHOD 300.0: ANIONS</b>			
Chloride			

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	<b>*</b> Value exceeds Maximum Contaminant Level.	<b>B</b> Analyte detected in the associated Method Blank
	<b>D</b> Sample Diluted Due to Matrix	<b>E</b> Value above quantitation range
	<b>H</b> Holding times for preparation or analysis exceeded	<b>J</b> Analyte detected below quantitation limits
	<b>ND</b> Not Detected at the Reporting Limit	<b>P</b> Sample pH Not In Range
	<b>R</b> RPD outside accepted recovery limits	<b>RL</b> Reporting Detection Limit
	<b>S</b> % Recovery outside of range due to dilution or matrix	<b>W</b> Sample container temperature is out of limit as specified

## Analytical Report

Lab Order: 1612949

Date Reported: 12/28/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Resources  
 Project: Dayton Water Line (Gushwa DX #1)

Lab Order: 1612949

Lab ID: 1612949-006

Collection Date: 12/13/2016 10:24:00 AM

Client Sample ID: S3-2-2'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/23/2016 1:28:27 PM	29393

Lab ID: 1612949-007

Collection Date: 12/13/2016 10:25:00 AM

Client Sample ID: S3-2-3'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/23/2016 2:05:41 PM	29393

Lab ID: 1612949-008

Collection Date: 12/13/2016 10:27:00 AM

Client Sample ID: S3-2-4'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/23/2016 2:18:06 PM	29393

Lab ID: 1612949-009

Collection Date: 12/13/2016 10:32:00 AM

Client Sample ID: S4-1-1'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	47	30		mg/Kg	20	12/27/2016 9:22:15 PM	29393

Lab ID: 1612949-010

Collection Date: 12/13/2016 10:33:00 AM

Client Sample ID: S4-1-2'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	12/23/2016 2:42:54 PM	29393

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 2 of 5
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	



Analytical Report

Lab Order: 1612949

Date Reported: 12/28/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Resources  
Project: Dayton Water Line (Gushwa DX #1)

Lab Order: 1612949

Lab ID: 1612949-011 Collection Date: 12/13/2016 10:34:00 AM  
Client Sample ID: S4-1-3' Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: LGT							
Chloride	330	30		mg/Kg	20	12/27/2016 9:34:39 PM	29393

Lab ID: 1612949-012 Collection Date: 12/13/2016 10:36:00 AM  
Client Sample ID: S4-1-4' Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: LGT							
Chloride	2100	75		mg/Kg	50	12/27/2016 9:47:04 PM	29393

Lab ID: 1612949-013 Collection Date: 12/13/2016 10:40:00 AM  
Client Sample ID: S4-2-1' Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: LGT							
Chloride	ND	30		mg/Kg	20	12/23/2016 3:20:07 PM	29393

Lab ID: 1612949-014 Collection Date: 12/13/2016 10:41:00 AM  
Client Sample ID: S4-2-2' Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: LGT							
Chloride	ND	30		mg/Kg	20	12/23/2016 3:32:32 PM	29393

Lab ID: 1612949-015 Collection Date: 12/13/2016 10:43:00 AM  
Client Sample ID: S4-2-3' Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: LGT							
Chloride	580	30		mg/Kg	20	12/27/2016 9:59:28 PM	29393

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 3 of 5
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

**Analytical Report**

Lab Order: 1612949

Date Reported: 12/28/2016

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** EOG Resources  
**Project:** Dayton Water Line (Gushwa DX #1)**Lab Order:** 1612949**Lab ID:** 1612949-016**Collection Date:** 12/13/2016 10:45:00 AM**Client Sample ID:** S4-2-4'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: LGT
Chloride	2700	75		mg/Kg	50	12/27/2016 10:11:52 PM	29393

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1612949

28-Dec-16

Client: EOG Resources  
Project: Dayton Water Line (Gushwa DX #1)

Sample ID	MB-29393	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	29393	RunNo:	39649					
Prep Date:	12/23/2016	Analysis Date:	12/23/2016	SeqNo:	1242074	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-29393	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	29393	RunNo:	39649					
Prep Date:	12/23/2016	Analysis Date:	12/23/2016	SeqNo:	1242075	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1612849

RepNo: 1

Received by/date:

Logged By: Ashley Gallegos

12/16/2016 9:05:00 AM

Completed By: Ashley Gallegos

12/19/2016 9:13:58 AM

Reviewed By:

### Chain of Custody

1. Custody seals intact on sample bottles?

Yes ☐

No ☐

Not Present ☒

2. Is Chain of Custody complete?

Yes ☒

No ☐

Not Present ☐

3. How was the sample delivered?

Courier

### Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ?

Yes ☒

No ☐

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

7. Sufficient sample volume for indicated test(s)?

Yes ☒

No ☐

8. Are samples (except VOA and ONG) properly preserved?

Yes ☒

No ☐

9. Was preservative added to bottles?

Yes ☐

No ☒

NA ☐

10. VOA vials have zero headspace?

Yes ☐

No ☐

No VOA Vials ☒

11. Were any sample containers received broken?

Yes ☐

No ☒

# of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody)

Yes ☒

No ☐

13. Are matrices correctly identified on Chain of Custody?

Yes ☒

No ☐

14. Is it clear what analyses were requested?

Yes ☒

No ☐

15. Were all holding times able to be met?  
(If no, notify customer for authorization.)

Yes ☒

No ☐

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order?

Yes ☐

No ☐

NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

### 18. Cooler Information

Cooler No.	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No.	Seal Date	Signed By:
1	3.6	Good	Yes			

# Chain-of-Custody Record

Client: EOG Resources Inc.

Mailing Address:

05 South 4th Street Artesia, NM 88210

Phone #: 575-703-6537

Email or Fax#: Chase Settle@eogresources.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Dayton Water Line (Gushwa DX #1)

Project #:

Project Manager:

Chase Settle

PO # 205. 0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 35

HEAL No: 11612049

Container Type and #

Preservative Type

None

1 - 4oz.

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Analysis Request

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH Method 8015B (Gas/Diesel)

TPH (Method 418.1)

EDB (Method 504.1)

8310 (PNA or PAH)

RCRA 8 Metals

Anions (F, Cl, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

8270 (Semi-VOA)

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

January 19, 2017

Chase Settle  
EOG Resources  
105 South Fourth Street  
Artesia, NM 88210  
TEL: (575) 748-4111  
FAX

RE: Dayton Water Line (Gushwa DX #1)

OrderNo.: 1701493

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 15 sample(s) on 1/12/2017 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



**Hall Environmental Analysis Laboratory, Inc.****Analytical Report**

Lab Order: 1701493

Date Reported: 1/19/2017

**CLIENT:** EOG Resources  
**Project:** Dayton Water Line (Gushwa DX #1)**Lab Order:** 1701493**Lab ID:** 1701493-001**Collection Date:** 1/5/2017 8:19:00 AM**Client Sample ID:** S3-1-6'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	2100	75		mg/Kg	50	1/16/2017 6:51:48 PM	29684

**Lab ID:** 1701493-002**Collection Date:** 1/5/2017 8:25:00 AM**Client Sample ID:** S3-1-8'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1000	30		mg/Kg	20	1/13/2017 1:02:53 PM	29684

**Lab ID:** 1701493-003**Collection Date:** 1/5/2017 8:31:00 AM**Client Sample ID:** S3-1-10'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	890	30		mg/Kg	20	1/13/2017 1:15:18 PM	29684

**Lab ID:** 1701493-004**Collection Date:** 1/5/2017 8:37:00 AM**Client Sample ID:** S3-1-12'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 1:27:43 PM	29684

**Lab ID:** 1701493-005**Collection Date:** 1/5/2017 8:45:00 AM**Client Sample ID:** S3-1-14'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 1:40:07 PM	29684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order: 1701493

Date Reported: 1/19/2017

**CLIENT:** EOG Resources  
**Project:** Dayton Water Line (Gushwa DX #1)

**Lab Order:** 1701493

**Lab ID:** 1701493-006

**Collection Date:** 1/5/2017 8:59:00 AM

**Client Sample ID:** S4-1-6'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	2300	150		mg/Kg	100	1/16/2017 7:04:13 PM	29684

**Lab ID:** 1701493-007

**Collection Date:** 1/5/2017 9:03:00 AM

**Client Sample ID:** S4-1-8'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 2:04:56 PM	29684

**Lab ID:** 1701493-008

**Collection Date:** 1/5/2017 9:09:00 AM

**Client Sample ID:** S4-1-10'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 2:17:21 PM	29684

**Lab ID:** 1701493-009

**Collection Date:** 1/5/2017 9:15:00 AM

**Client Sample ID:** S4-1-12'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 2:54:35 PM	29684

**Lab ID:** 1701493-010

**Collection Date:** 1/5/2017 9:23:00 AM

**Client Sample ID:** S4-1-14'

**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	1/13/2017 3:06:59 PM	29684

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 2 of 4
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

## Analytical Report

Lab Order: 1701493

Date Reported: 1/19/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Resources  
 Project: Dayton Water Line (Gushwa DX #1)

Lab Order: 1701493

Lab ID: 1701493-011

Collection Date: 1/5/2017 9:35:00 AM

Client Sample ID: S4-2-6'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							
Chloride	2500	75		mg/Kg	50	1/16/2017 7:16:38 PM	29684

Analyst: LGT

Lab ID: 1701493-012

Collection Date: 1/5/2017 9:40:00 AM

Client Sample ID: S4-2-8'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							
Chloride	840	30		mg/Kg	20	1/13/2017 3:31:47 PM	29684

Analyst: LGT

Lab ID: 1701493-013

Collection Date: 1/5/2017 9:46:00 AM

Client Sample ID: S4-2-10'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							
Chloride	120	30		mg/Kg	20	1/13/2017 3:44:13 PM	29684

Analyst: LGT

Lab ID: 1701493-014

Collection Date: 1/5/2017 9:55:00 AM

Client Sample ID: S4-2-12'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							
Chloride	37	30		mg/Kg	20	1/13/2017 3:56:38 PM	29684

Analyst: LGT

Lab ID: 1701493-015

Collection Date: 1/5/2017 10:04:00 AM

Client Sample ID: S4-2-14'

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							
Chloride	ND	30		mg/Kg	20	1/13/2017 4:09:02 PM	29684

Analyst: LGT

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	
	D Sample Diluted Due to Matrix	E Value above quantitation range	
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	Page 3 of 4
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1701493

19-Jan-17

Client: EOG Resources

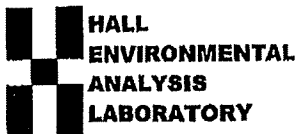
Project: Dayton Water Line (Gushwa DX #1)

Sample ID	MB-29684	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	29684	RunNo:	40017					
Prep Date:	1/13/2017	Analysis Date:	1/13/2017	SeqNo:	1254178	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-29684	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	29684	RunNo:	40017					
Prep Date:	1/13/2017	Analysis Date:	1/13/2017	SeqNo:	1254179	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.8	90	110			

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: EOG/Yates

Work Order Number: 1701493

RcptNo: 1

Received by/date:

BE

01/12/17

Logged By:

Ashley Gallegos

1/12/2017 9:35:00 AM

AG

Completed By:

Ashley Gallegos

1/12/2017 12:40:56 PM

AG

Reviewed By:

AG

01/12/17

### Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

### Log In

4. Was an attempt made to cool the samples? Yes ☐ No ☒ NA ☐
5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☐ No ☒ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: \_\_\_\_\_

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via:

|

eMail

|

Phone

|

Fax

|

In Person

Regarding:

Client Instructions:

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	13.3	Good	Yes			







# Appendix D

## C-141 Initial

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

FEB 18 2015

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in  
RECEIVED with 19.15.29 NMOC.

**Release Notification and Corrective Action**

**NAB1505030280** **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	25575	Contact Chase Settle
Address 104 S. 4 <sup>th</sup> Street, Artesia, NM 88210		Telephone No. 575-748-4171
Facility Name Dayton Water Line (Gushwa DX #1)		Facility Type Pipeline
Surface Owner Fee	Mineral Owner	API No. 30-015-10975

**LOCATION OF RELEASE**

**30015-21703**

Unit Letter J	Section 21	Township 18S	Range 26E	Feet from the North/South Line	Feet from the East/West Line	County Eddy
------------------	---------------	-----------------	--------------	-----------------------------------	---------------------------------	----------------

Latitude 32.73268 Longitude -104.38606

**NATURE OF RELEASE**

Type of Release Produced Water	Volume of Release 5400 B/PW	Volume Recovered 5160 B/PW
Source of Release 6 inch PVC produced water line	Date and Hour of Occurrence 2/5/2015; a.m.	Date and Hour of Discovery 2/5/2015; 10:40 a.m.
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher, Heather Patterson, Randy Dade	
By Whom? Amber Cannon	Date and Hour 2/5/2015; 11:20 a.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* There was a failure of the 6 in. PVC water line, causing a release of produced water.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 1,000' X 230' was affected on the west side of the railroad tracks running south to north, 705' X 90' was affected on the east side of the railroad tracks running south to north with 2 fingers splitting off to the east, one approximately 395' X 50' and the other 595' X 75'. Vacuum trucks were called to remove standing fluid, and impacted soils will be excavated and hauled to a NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. Depth to Ground Water: 50-99' (approximately 75', Section 21, T18S-R26E, per Trend Map), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		

Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Chase Settle	Approved by Environmental Specialist:	
Title: NM Environmental Regulatory Agent	Approval Date: 2/19/15	Expiration Date: N/A
E-mail Address: csettle@yatespetroleum.com	Conditions of Approval: Remediation per O.C.D. Rules & Guidelines Attached <input type="checkbox"/>	
Date: 02/18/2015 Phone: 575-748-4171	SUBMIT REMEDIATION PROPOSAL NO. <u>311915</u>	

LATER THAN: 3/19/15

2RP-2824