

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

www.yatespetroleum.com

JOHN A. YATES
CHAIRMAN EMERITUS

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CHIEF EXECUTIVE OFFICER

JOHN D. PERINI
CHIEF FINANCIAL OFFICER

February 19, 2016

Ms. Kellie Jones/Mr. Jamie Keyes
NMOCD District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Belco AIA Federal #3-H
30-025-38719
Section 14, T20S-R32E
Lea County, New Mexico

Ms. Jones/Mr. Keyes:

Yates Petroleum Corporation is submitting the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated September 16, 2015.

If there are no objections with the scope of work described in the plan, Yates will have a contractor begin work on or after March 1, 2016.

If you have any questions, feel free to call me at (575) 748-4171

Thank you.

YATES PETROLEUM CORPORATION

Chase Settle
Environmental Regulatory Agent

Enclosure(s)

REVIEWED

By Kellie Jones at 11:02 am, Feb 24, 2016

APPROVED Conditional

By Kellie Jones at 11:02 am, Feb 24, 2016

1. S2 has not been delineated. Ensure that S2 has been clearly delineated.
2. Instead of two feet to be removed, OCD requests Yates remove four feet.
3. Ensure BLM approval/concurrence.

KATHY H. PORTER
SECRETARY

JAMES D. SCHAFER
TREASURER

Yates Petroleum Corporation

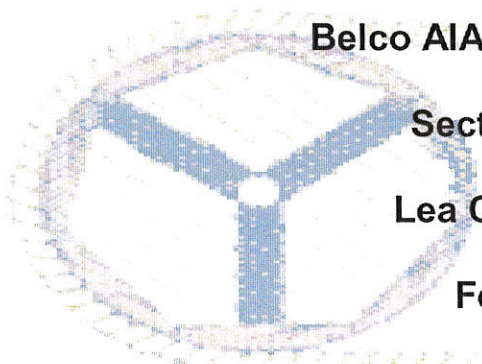
Belco AIA Federal #3-H Work Plan

Section 14, T20S-R32E

Lea County, New Mexico

February 19, 2016

1RP- 3867



I. Location

The well is located approximately 33 miles east of Carlsbad, NM and 2 miles northwest off of Laguna Road.

II. Background

On September 16, 2015, Yates submitted to the NMOCD District I office a Form C-141 for the release of 8 B/O & 17 B/PW with 3 B/O & 7 B/PW recovered. The affected area is approximately 80 feet by 40 feet between the two pumping units on the location pad. Failure of a poly flow line caused oil and produced water to be released. Initial delineation samples were taken (9/17/2015) and sent to a NMOCD approved laboratory (9/29/2015, results enclosed). Further sampling was conducted within the release area (11/5/2015) and sent to a NMOCD approved laboratory (11/20/2015, results enclosed). Final sampling was conducted within the release area (2/11/2016) and sent to a NMOCD approved laboratory (2/18/2016, results enclosed).

III. Surface and Ground Water

Area surface geology is Cenozoic Quaternary. Previous core data indicates that no groundwater was discovered above 76 feet, making the site ranking for this site a ten (10). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is ten (10) based on the as following:

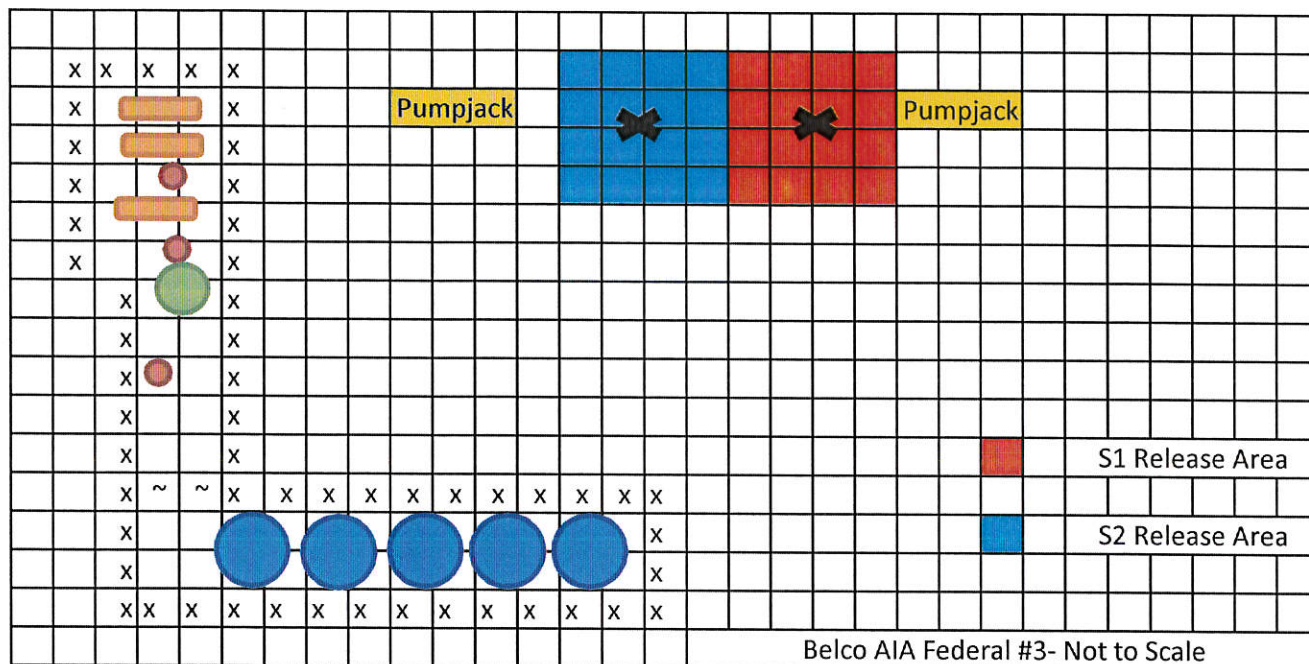
Depth to ground water	50-99'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

IV. Soils

The area consists of soils that are caliche and loamy top soil and are interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

V. Scope of Work

Based on enclosed analytical results, the depth to groundwater (>76'), and a decrease in chlorides, Yates Petroleum Corporation will excavate two (2) feet of impacted soil within the S1 and S2 release areas. Both areas will then be backfilled with two (2) feet of caliche. All excavated soil will be hauled to a NMOCD approved facility for disposal. The TPH & BTEX are within the RRAL's for BTEX (50 ppm) and TPH (1000 ppm) for the Total Ranking Score of ten (10), no further analytical testing of TPH and/or BTEX will be conducted (all chloride analytical results are for documentation). When remediation work is completed a C-141, Final Report, will be submitted to the NMOCD requesting closure of the site.



Site Ranking is ten (10).

DTGW 50-99' (>76', Section 14, T20S-R32E, no groundwater present previous core data 9/17/2007)

All results are ppm. Chlorides for documentation

Released: 8 B/O & 17 B/PW; Recovered: 3 B/O & 7 B/PW Release Date: 09/09/2015 1RP-3867

Sample ID	Analytical ID	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	1509962	9/17/2015	Hand Auger	1'	ND	ND	ND	930
S1-2'	1511382	11/5/2015	Backhoe	2'	N/A	N/A	N/A	1800
S1-3'	1511382	11/5/2015	Backhoe	3'	N/A	N/A	N/A	1000
S1-4'	1511382	11/5/2015	Backhoe	4'	N/A	N/A	N/A	830
S1-5'	H600337	2/11/2016	Backhoe	5'	N/A	N/A	N/A	864
S1-6'	H600337	2/11/2016	Backhoe	6'	N/A	N/A	N/A	576
S1-7'	H600337	2/11/2016	Backhoe	7'	N/A	N/A	N/A	400
S1-9'	H600337	2/11/2016	Backhoe	9'	N/A	N/A	N/A	560
S1-11'	H600337	2/11/2016	Backhoe	11'	N/A	N/A	N/A	432
S1-13'	H600337	2/11/2016	Backhoe	13'	N/A	N/A	N/A	416
S2-1'	1509962	9/17/2015	Hand Auger	1'	ND	ND	ND	3100
S2-2'	1511382	11/5/2015	Backhoe	2'	N/A	N/A	N/A	1100
S2-3'	1511382	11/5/2015	Backhoe	3'	N/A	N/A	N/A	930
S2-4'	1511382	11/5/2015	Backhoe	4'	N/A	N/A	N/A	810
S2-5'	H600337	2/11/2016	Backhoe	5'	N/A	N/A	N/A	1060
S2-6'	H600337	2/11/2016	Backhoe	6'	N/A	N/A	N/A	864
S2-7'	H600337	2/11/2016	Backhoe	7'	N/A	N/A	N/A	608
S2-9'	H600337	2/11/2016	Backhoe	9'	N/A	N/A	N/A	304
S2-11'	H600337	2/11/2016	Backhoe	11'	N/A	N/A	N/A	368
S2-13'	H600337	2/11/2016	Backhoe	13'	N/A	N/A	N/A	528



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

September 29, 2015

Chase Settle
Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4217
FAX

RE: Belco AIA Federal #3-H

OrderNo.: 1509962

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/19/2015 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 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 1509962

Date Reported: 9/29/2015

CLIENT: Yates Petroleum Corporation

Client Sample ID: S1-1'

Project: Belco AIA Federal #3-H

Collection Date: 9/17/2015 12:16:00 PM

Lab ID: 1509962-001

Matrix: SOIL

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	930	30		mg/Kg	20	9/24/2015 6:20:58 PM	21493
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/23/2015 12:45:31 PM	21433
Surr: BFB	97.1	70-130		%REC	1	9/23/2015 12:45:31 PM	21433
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	9/23/2015 5:15:10 PM	21428
Surr: DNOP	112	57.9-140		%REC	1	9/23/2015 5:15:10 PM	21428
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.048		mg/Kg	1	9/23/2015 12:45:31 PM	21433
Toluene	ND	0.048		mg/Kg	1	9/23/2015 12:45:31 PM	21433
Ethylbenzene	ND	0.048		mg/Kg	1	9/23/2015 12:45:31 PM	21433
Xylenes, Total	ND	0.097		mg/Kg	1	9/23/2015 12:45:31 PM	21433
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%REC	1	9/23/2015 12:45:31 PM	21433
Surr: 4-Bromofluorobenzene	104	70-130		%REC	1	9/23/2015 12:45:31 PM	21433
Surr: Dibromofluoromethane	105	70-130		%REC	1	9/23/2015 12:45:31 PM	21433
Surr: Toluene-d8	93.5	70-130		%REC	1	9/23/2015 12:45:31 PM	21433

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
	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	

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation

Client Sample ID: S2-1'

Project: Belco AIA Federal #3-H

Collection Date: 9/17/2015 12:27:00 PM

Lab ID: 1509962-002

Matrix: SOIL

Received Date: 9/19/2015 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	3100	150		mg/Kg	100	9/29/2015 12:02:07 AM	21493
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/23/2015 2:08:18 PM	21433
Surr: BFB	101	70-130		%REC	1	9/23/2015 2:08:18 PM	21433
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	9/23/2015 5:36:34 PM	21428
Surr: DNOP	102	57.9-140		%REC	1	9/23/2015 5:36:34 PM	21428
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Benzene	ND	0.048		mg/Kg	1	9/23/2015 2:08:18 PM	21433
Toluene	ND	0.048		mg/Kg	1	9/23/2015 2:08:18 PM	21433
Ethylbenzene	ND	0.048		mg/Kg	1	9/23/2015 2:08:18 PM	21433
Xylenes, Total	ND	0.096		mg/Kg	1	9/23/2015 2:08:18 PM	21433
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	9/23/2015 2:08:18 PM	21433
Surr: 4-Bromofluorobenzene	98.5	70-130		%REC	1	9/23/2015 2:08:18 PM	21433
Surr: Dibromofluoromethane	110	70-130		%REC	1	9/23/2015 2:08:18 PM	21433
Surr: Toluene-d8	102	70-130		%REC	1	9/23/2015 2:08:18 PM	21433

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
	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	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509962

30-Sep-15

Client: Yates Petroleum Corporation

Project: Belco AIA Federal #3-H

Sample ID	MB-21493	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	21493	RunNo:	29095					
Prep Date:	9/24/2015	Analysis Date:	9/24/2015	SeqNo:	883274	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-21493	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	21493	RunNo:	29095					
Prep Date:	9/24/2015	Analysis Date:	9/24/2015	SeqNo:	883275	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509962

30-Sep-15

Client: Yates Petroleum Corporation

Project: Belco AIA Federal #3-H

Sample ID	MB-21428	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	21428	RunNo:	29041					
Prep Date:	9/22/2015	Analysis Date:	9/23/2015	SeqNo:	881439	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	11		10.00		107	57.9	140			

Sample ID	LCS-21428	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	21428	RunNo:	29041					
Prep Date:	9/22/2015	Analysis Date:	9/23/2015	SeqNo:	881441	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.9	57.4	139			
Surr: DNOP	5.2		5.000		105	57.9	140			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509962

30-Sep-15

Client: Yates Petroleum Corporation

Project: Belco AIA Federal #3-H

Sample ID	mb-21433		SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	PBS		Batch ID: 21433	RunNo: 29067						
Prep Date:	9/22/2015		Analysis Date: 9/23/2015	SeqNo: 882273		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		97.7	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.49		0.5000		97.7	70	130			

Sample ID	lcs-21433		SampType: LCS	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID:	LCSS		Batch ID: 21433	RunNo: 29067						
Prep Date:	9/22/2015		Analysis Date: 9/23/2015	SeqNo: 882274		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.050	1.000	0	95.1	70	130			
Toluene	1.0	0.050	1.000	0	100	70	130			
Ethylbenzene	1.0	0.050	1.000	0	100	70	130			
Xylenes, Total	3.0	0.10	3.000	0	98.9	70	130			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.54		0.5000		108	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.50		0.5000		99.5	70	130			

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 | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1509962

30-Sep-15

Client: Yates Petroleum Corporation

Project: Belco AIA Federal #3-H

Sample ID	mb-21433	SampType:	MBLK		TestCode:	EPA Method 8015D Mod: Gasoline Range				
Client ID:	PBS	Batch ID:	21433		RunNo:	29067				
Prep Date:	9/22/2015	Analysis Date:	9/23/2015		SeqNo:	882242	Units:	mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	500		500.0		101	70	130			

Sample ID	Ics-21433	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID: 21433			RunNo: 29067					
Prep Date:	9/22/2015	Analysis Date: 9/23/2015			SeqNo: 882243		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	70	123			
Surr: BFB	480		500.0		96.6	70	130			

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

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number 1509962

ReptNo: 1

Received by/date: LM 09/19/15

Logged By: Celina Sessa

9/19/2015 7:50:00 AM

Celina Sessa

Completed By: Celina Sessa

9/21/2015 4:39:51 PM

Celina Sessa

Reviewed By: *AG*

09/22/15

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°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 ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted?
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 ☐ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			



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

November 20, 2015

Chase Settle

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4217
FAX

RE: Belco AIA Federal #3-H

OrderNo.: 1511382

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/10/2015 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 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order: 1511382

Date Reported: 11/20/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Yates Petroleum Corporation
Project: Belco AIA Federal #3-H

Lab Order: 1511382

Lab ID: 1511382-001

Collection Date: 11/5/2015 11:35:00 AM

Client Sample ID: S1-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1800	75		mg/Kg	50	11/17/2015 4:47:13 AM	22349

Lab ID: 1511382-002

Collection Date: 11/5/2015 11:40:00 AM

Client Sample ID: S1-3'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1000	30		mg/Kg	20	11/13/2015 2:56:13 PM	22349

Lab ID: 1511382-003

Collection Date: 11/5/2015 11:45:00 AM

Client Sample ID: S1-4'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	830	30		mg/Kg	20	11/13/2015 3:08:38 PM	22349

Lab ID: 1511382-004

Collection Date: 11/5/2015 11:55:00 AM

Client Sample ID: S2-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	1100	30		mg/Kg	20	11/13/2015 3:21:02 PM	22349

Lab ID: 1511382-005

Collection Date: 11/5/2015 12:00:00 PM

Client Sample ID: S2-3'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	930	30		mg/Kg	20	11/13/2015 3:33:26 PM	22349

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
	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	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order: 1511382

Date Reported: 11/20/2015

CLIENT: Yates Petroleum Corporation
Project: Belco AIA Federal #3-H

Lab Order: 1511382

Lab ID: 1511382-006

Collection Date: 11/5/2015 12:05:00 PM

Client Sample ID: S2-4'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	810	30		mg/Kg	20	11/13/2015 5:00:19 PM	22349

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
	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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511382

20-Nov-15

Client: Yates Petroleum Corporation

Project: Belco AIA Federal #3-H

Sample ID	MB-22349	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	22349	RunNo:	30257					
Prep Date:	11/13/2015	Analysis Date:	11/13/2015	SeqNo:	922446	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-22349	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	22349	RunNo:	30257					
Prep Date:	11/13/2015	Analysis Date:	11/13/2015	SeqNo:	922447	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.9	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

Sample Log-In Check List

Client Name: Yates Petroleum Corpora

Work Order Number: 1511382

ReptNo: 1

Received by/date:

JA

11/10/15

Logged By: Ashley Gallegos

11/10/2015 9:20:00 AM

Completed By: Ashley Gallegos

11/10/2015 9:39:34 AM

Reviewed By:

CS

11/10/15

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°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 ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted?
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 ☐ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Yes			

Chain-of-Custody Record

Client: Yates Petroleum Corporation

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Belco AIA Federal #3-H

Project #:

30-025-38719

Project Manager:

Chase Settle
PO # 205.0750

Sampler: Chase Settle

On Ice: ☒ Yes ☐ No

Sample Temperature: 47

Container Type and #

Preservative Type

HEAL No.

151382

-001

-002

-003

-004

-005

-006

-007

-008

-009

-010

-011

-012

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

February 18, 2016

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: BELCO AIA FEDERAL #3

Enclosed are the results of analyses for samples received by the laboratory on 02/12/16 14:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. 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.

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

Analytical Results For:

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

Received:	02/12/2016	Sampling Date:	02/11/2016
Reported:	02/18/2016	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL #3	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S1-5' (H600337-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S1-6' (H600337-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S1-7' (H600337-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S1-9' (H600337-04)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	02/17/2016	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	02/12/2016	Sampling Date:	02/11/2016
Reported:	02/18/2016	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL #3	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S1-11' (H600337-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	02/17/2016	ND	416	104	400	3.77		

Sample ID: S1-13' (H600337-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S2-5' (H600337-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S2-6' (H600337-08)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	864	16.0	02/17/2016	ND	416	104	400	3.77		

Sample ID: S2-7' (H600337-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	608	16.0	02/17/2016	ND	416	104	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	02/12/2016	Sampling Date:	02/11/2016
Reported:	02/18/2016	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL #3	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S2-9' (H600337-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	02/17/2016	ND	416	104	400	3.77	

Sample ID: S2-11' (H600337-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	02/17/2016	ND	416	104	400	3.77		

Sample ID: S2-13' (H600337-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	02/17/2016	ND	416	104	400	3.77		

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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

Comp: (505) 393-2326 Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Sampler Signature: _____

e-mail: csettle@yatespetroleum.com

Fax No: 575-748-4131

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Project Name: Belco AIA Federal #3

Project #:

Project Loc: Belco AIA Federal #3

PO #: 205, 0750

(lab use only)		ORDER #: H600337																														
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO ₃	HCl	H ₂ SO ₄	NaOH	Na ₂ S ₂ O ₃	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 ₄ , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 6260	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
1	S1-5'			2/11/2016	7:45 AM		1										S															X
2	S1-6'			2/11/2016	7:50 AM		1										S															X
3	S1-7'			2/11/2016	7:55 AM		1										S															X
4	S1-9'			2/11/2016	8:00 AM		1										S															X
5	S1-11'			2/11/2016	8:08 AM		1										S															X
6	S1-13'			2/11/2016	8:16 AM		1										S															X
7	S2-5'			2/11/2016	8:29 AM		1										S															X
8	S2-6'			2/11/2016	8:33 AM		1										S															X
9	S2-7'			2/11/2016	8:35 AM		1										S															X
10	S2-9'			2/11/2016	8:40 AM		1										S															X

Relinquished by: [Signature] Date: 2-12-16 Time: [Blank] Received by: [Signature] Date: 2/12/16 Time: 2:40

Relinquished by: [Blank] Date: [Blank] Time: [Blank] Received by: [Blank] Date: [Blank] Time: [Blank]

Special Instructions: [Blank]

Laboratory Comments: [Blank]

Sample Containers Intact? ☒ Y ☐ N

VOCs Free of Headspace? ☒ Y ☐ N

Labels on container(s) ☒ Y ☐ N

Custody seals on container(s) ☒ Y ☐ N

Custody seals on cooler(s) ☒ Y ☐ N

Sample Hand Delivered by Sampler/Client Rep.? ☒ Y ☐ N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 25.8 °C

