MARTIN YATES, III 1912-1985 FRANK W. YATES 1936-1986

S.P YATES 1914-2008



JOHN A. YATES CHAIRMAN EMERITUS

JOHN A. YATES JR. CHAIRMAN OF THE BOARD

DOUGLAS E. BROOKS PRESIDENT CHIEF EXECUTIVE OFFICER

JOHN D. PERINI CHIEF FINANCIAL OFFICER

105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118

> TELEPHONE (575) 748-1471 www.yatespetroleum.com

February 8, 2016

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

Re: Belco AIA Federal Battery 30-025-26826 Section 14, T20S-R32E Lea County, New Mexico **RECEIVED** By JKeyes at 11:22 am, Feb 08, 2016

**APPROVED** Conditionally By JKeyes at 11:22 am, Feb 08, 2016

Stipulation: Only the the first 1ft of soil from the excavation around S5 may be used for backfill.

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 reports dated June 30, 2015 and October 8, 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)

KATHY H. PORTER SECRETARY JAMES D. SCHAFER TREASURER

# **Yates Petroleum Corporation**

Belco AIA Federal Battery Work Plan

Section 14, T20S-R32E

Lea County, New Mexico

February 8, 2016

1RP- 3711 1RP- 3903

# I. Location

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

# II. Background

On June 30, 2015, Yates submitted to the NMOCD District I office a Form C-141 for the release of 2 B/O and 148 B/PW with 0 B/O and 130 B/PW recovered. Then on October 8, 2015, Yates submitted to the NMOCD District I office a Form C-141 for the release of 300 B/PW with 270 B/PW recovered. The affected area for both releases is approximately 170 feet by 16 feet area immediately south of the battery off location and an area 318 feet by 60 feet east and north of the battery across the production pad. Failure of a poly transfer line caused oil and produced water to be released. Release originated behind the battery. Initial delineation samples were taken (11/5/2015) and sent to a NMOCD approved laboratory (11/20/2015 & 12/02/2015, results enclosed). Subsequent sampling was conducted in the S4 and S5 sample area (12/18/2015) and sent to a NMOCD approved laboratory (01/08/2016, 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:

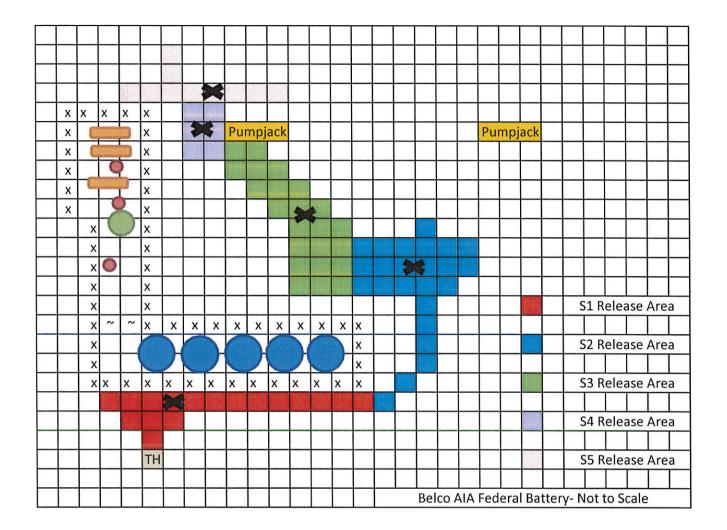
Depth to ground water	50-99'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

## 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'), a liner already installed in the S1 area at 3' BSL, and a decrease in chlorides, Yates Petroleum Corporation will excavate four (4) feet of impacted soil within the S4 and S5 sample areas. A 20 ml synthetic liner will then be installed in the bottom of the excavation that will prevent any further migration of chlorides. The S4 area will be backfilled with four (4) feet of caliche and the S5 area will be backfilled with the first two (2) feet of excavated material from that area followed by two (2) feet of topsoil to reestablish vegetation. All excavated soil from the S4 area and the bottom two (2) feet from the S5 area will be hauled to a NMOCD approved facility for disposal. Based on analytical results, there will be no further excavation in the S1, S2, and S3 sample areas beyond the six (6) to eight (8) inches that was removed during the initial scrape. 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: 2 B/O & 148 B/PW; Recovered: 0 B/O & 130 B/PW Release Date: 06/19/2015 1RP-3711 Released: 300 B/PW; Recovered: 270 B/PW Release Date: 07/26/2015 1RP-3903

Sample ID	Analytical ID	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	1511383	11/5/2015	Backhoe	1'	ND	ND	ND	1000
S2-2'	1511383	11/5/2015	Backhoe	2'	ND	ND	ND	310
S2-1'	1511383	11/5/2015	Backhoe	1'	ND	ND	ND	520
S2-2'	1511383	11/5/2015	Backhoe	2'	ND	ND	ND	560
S2-3'	H503110	11/5/2015	Backhoe	3'	N/A	N/A	N/A	400
S2-4'	H503110	11/5/2015	Backhoe	4'	N/A	N/A	N/A	208
\$2-5'	H503110	11/5/2015	Backhoe	5'	N/A	N/A	N/A	272
S2-6'	H503110	11/5/2015	Backhoe	6'	N/A	N/A	N/A	480
S2-7'	H503110	11/5/2015	Backhoe	7'	N/A	N/A	N/A	400
S3-1'	1511383	11/5/2015	Backhoe	1'	ND	ND	ND	48
S3-2'	1511383	11/5/2015	Backhoe	2'	ND	ND	ND	1900
S3-3'	H503111	11/5/2015	Backhoe	3'	N/A	N/A	N/A	704
S3-4'	H503111	11/5/2015	Backhoe	4'	N/A	N/A	N/A	464

\$3-5'	H503111	11/5/2015	Backhoe	5'	N/A	N/A	N/A	560
S3-6'	H503111	11/5/2015	Backhoe	6'	N/A	N/A	N/A	496
S3-7'	H503111	11/5/2015	Backhoe	7'	N/A	N/A	N/A	672
S4-1'	1511383	11/5/2015	Backhoe	1'	ND	ND	ND	3200
S4-2'	1511383	11/5/2015	Backhoe	2'	ND	ND	ND	2400
S4-3'	H503112	11/5/2015	Backhoe	3'	N/A	N/A	N/A	3560
S4-4'	H503112	11/5/2015	Backhoe	4'	N/A	N/A	N/A	3840
S4-5'	H503112	11/5/2015	Backhoe	5'	N/A	N/A	N/A	2880
S4-6'	H503112	11/5/2015	Backhoe	6'	N/A	N/A	N/A	2520
S4-7'	H503112	11/5/2015	Backhoe	7'	N/A	N/A	N/A	2200
S4-10'	1512 B04	12/18/2015	Core Rig	10'	N/A	N/A	N/A	780
S4-15'	1512 B04	12/18/2015	Core Rig	15'	N/A	N/A	N/A	710
S5-1'	1511383	11/5/2015	Backhoe	1'	ND	ND	ND	170
S5-2'	1511383	11/5/2015	Backhoe	2'	ND	ND	ND	880
S5-3'	H503113	11/5/2015	Backhoe	3'	N/A	N/A	N/A	4480
S5-4'	H503113	11/5/2015	Backhoe	4'	N/A	N/A	N/A	10700
S5-5'	H503113	11/5/2015	Backhoe	5'	N/A	N/A	N/A	2880
S5-6'	H503113	11/5/2015	Backhoe	6'	N/A	N/A	N/A	1840
S5-7'	H503113	11/5/2015	Backhoe	7'	N/A	N/A	N/A	3200
S5-10'	1512 B04	12/18/2015	Core Rig	10'	N/A	N/A	N/A	8400
S5-15'	1512 B04	12/18/2015	Core Rig	15'	N/A	N/A	N/A	8000
S5-20'	1512 B04	12/18/2015	Core Rig	20'	N/A	N/A	N/A	7000
S5-25'	1512 B04	12/18/2015	Core Rig	25'	N/A	N/A	N/A	4500
S5-30'	1512 B04	12/18/2015	Core Rig	30'	N/A	N/A	N/A	2000
S5-35'	1512 B04	12/18/2015	Core Rig	35'	N/A	N/A	N/A	6300
S5-40'	1512 B04	12/18/2015	Core Rig	40'	N/A	N/A	N/A	2900
S5-45'	1512 B04	12/18/2015	Core Rig	45'	N/A	N/A	N/A	290



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

November 20, 2015

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

RE: Belco AIA-Federal Battery

OrderNo.: 1511383

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 10 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 <u>www.hallenvironmental.com</u> 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 qualifers 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Lab ID:

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S1-1' Belco AIA-Federal Battery **Project:** Collection Date: 11/5/2015 8:46:00 AM 1511383-001 Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	1000	30	mg/Kg	20	11/16/2015 5:35:48 PM	M 22376
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	11/11/2015 1:51:37 PM	M 22273
Surr: DNOP	94.0	70-130	%REC	1	11/11/2015 1:51:37 PM	M 22273
EPA METHOD 8015D: GASOLINE RAM	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	11/11/2015 3:04:27 PI	M 22278
Surr: BFB	87.3	75.4-113	%REC	1	11/11/2015 3:04:27 PI	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.049	mg/Kg	1	11/11/2015 3:04:27 PI	M 22278
Toluene	ND	0.049	mg/Kg	1	11/11/2015 3:04:27 PI	M 22278
Ethylbenzene	ND	0.049	mg/Kg	1	11/11/2015 3:04:27 PI	M 22278
Xylenes, Total	ND	0.098	mg/Kg	1	11/11/2015 3:04:27 PI	M 22278
Surr: 4-Bromofluorobenzene	111	80-120	%REC	1	11/11/2015 3:04:27 Pi	M 22278

ifiers:	* Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	Е	Value above quantitation range
	H Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 1 of 14
I	Not Detected at the Reporting Limit	Р	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		
	S % Recovery outside of range due to dilution or n	natrix	natrix

# Hall Environmental Analysis Laboratory, Inc.

Lab ID:

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S1-2' Project: Belco AIA-Federal Battery Collection Date: 11/5/2015 8:49:00 AM 1511383-002 Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	310	30	mg/Kg	20	11/16/2015 6:13:02 PM	A 22376
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	11/11/2015 2:12:53 PI	M 22273
Surr: DNOP	89.5	70-130	%REC	1	11/11/2015 2:12:53 PI	M 22273
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	11/11/2015 5:00:21 PI	M 22278
Surr: BFB	86.1	75.4-113	%REC	1	11/11/2015 5:00:21 PI	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.047	mg/Kg	1	11/11/2015 5:00:21 PI	M 22278
Toluene	ND	0.047	mg/Kg	1	11/11/2015 5:00:21 PI	M 22278
Ethylbenzene	ND	0.047	mg/Kg	1	11/11/2015 5:00:21 PI	M 22278
Xylenes, Total	ND	0.094	mg/Kg	1	11/11/2015 5:00:21 PI	M 22278
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	11/11/2015 5:00:21 PI	M 22278

<b>Oualifiers</b> :	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
×	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 14
	ND	Not Detected at the Reporting Limit	Р	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		

# **Analytical Report** Lab Order 1511383

# Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/20/2015

**CLIENT:** Yates Petroleum Corporation Project: Belco AIA-Federal Battery

1511383-003

Lab ID:

Client Sample ID: S2-1' Collection Date: 11/5/2015 8:56:00 AM Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	520	30	mg/Kg	20	11/16/2015 6:25:27 P	M 22376
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	11/11/2015 2:34:07 P	M 22273
Surr: DNOP	94.9	70-130	%REC	1	11/11/2015 2:34:07 P	M 22273
EPA METHOD 8015D: GASOLINE RANG	θE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	11/11/2015 5:23:34 P	M 22278
Surr: BFB	86.8	75.4-113	%REC	1	11/11/2015 5:23:34 P	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.046	mg/Kg	1	11/11/2015 5:23:34 P	M 22278
Toluene	ND	0.046	mg/Kg	1	11/11/2015 5:23:34 P	M 22278
Ethylbenzene	ND	0.046	mg/Kg	1	11/11/2015 5:23:34 P	M 22278
Xylenes, Total	ND	0.093	mg/Kg	1	11/11/2015 5:23:34 P	M 22278
Surr: 4-Bromofluorobenzene	109	80-120	%REC	1	11/11/2015 5:23:34 P	M 22278

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 14
	ND	Not Detected at the Reporting Limit	Р	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.

**Project:** 

Lab ID:

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S2-2' Belco AIA-Federal Battery Collection Date: 11/5/2015 9:01:00 AM 1511383-004 Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM n DE Data Analyzad .... DI O LUL

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	560	30	mg/Kg	20	11/16/2015 6:37:51 PI	M 22376
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	11/11/2015 2:55:36 PI	M 22273
Surr: DNOP	95.8	70-130	%REC	1	11/11/2015 2:55:36 PI	M 22273
EPA METHOD 8015D: GASOLINE RAN	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	11/11/2015 5:46:55 PI	M 22278
Surr: BFB	86.1	75.4-113	%REC	1	11/11/2015 5:46:55 PI	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.048	mg/Kg	1	11/11/2015 5:46:55 PI	M 22278
Toluene	ND	0.048	mg/Kg	1	11/11/2015 5:46:55 Pl	M 22278
Ethylbenzene	ND	0.048	mg/Kg	1	11/11/2015 5:46:55 Pl	M 22278
Xylenes, Total	ND	0.097	mg/Kg	1	11/11/2015 5:46:55 Pl	M 22278
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	11/11/2015 5:46:55 P	M 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 14
	ND	Not Detected at the Reporting Limit	Р	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: \$3-1'

 Project: Belco AIA-Federal Battery
 Collection Date: 11/5/2015 9:35:00 AM

 Lab ID: 1511383-005
 Matrix: SOIL

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	48	30	mg/Kg	20	11/16/2015 6:50:16 PM	M 22376
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	11/11/2015 3:16:44 PM	M 22273
Surr: DNOP	96.7	70-130	%REC	1	11/11/2015 3:16:44 PM	M 22273
EPA METHOD 8015D: GASOLINE RAI	NGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	11/11/2015 6:10:04 PI	M 22278
Surr: BFB	85.3	75.4-113	%REC	1	11/11/2015 6:10:04 PI	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.047	mg/Kg	1	11/11/2015 6:10:04 PI	M 22278
Toluene	ND	0.047	mg/Kg	1	11/11/2015 6:10:04 PI	M 22278
Ethylbenzene	ND	0.047	mg/Kg	1	11/11/2015 6:10:04 PI	M 22278
Xylenes, Total	ND	0.095	mg/Kg	1	11/11/2015 6:10:04 PI	M 22278
Surr: 4-Bromofluorobenzene	106	80-120	%REC	1	11/11/2015 6:10:04 PI	M 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 5 of 14
	ND	Not Detected at the Reporting Limit	Р	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.

Lab ID:

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S3-2' Project: Belco AIA-Federal Battery Collection Date: 11/5/2015 9:41:00 AM 1511383-006 Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: LGT
Chloride	1900	75	mg/Kg	50	11/19/2015 10:36:52	AM 22376
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS	6			Analy	/st: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	11/11/2015 3:38:01	PM 22273
Surr: DNOP	93.9	70-130	%REC	1	11/11/2015 3:38:01 I	PM 22273
EPA METHOD 8015D: GASOLINE RAN	NGE				Analy	/st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	11/11/2015 6:33:25	PM 22278
Surr: BFB	87.0	75.4-113	%REC	1	11/11/2015 6:33:25	PM 22278
EPA METHOD 8021B: VOLATILES					Anal	/st: NSB
Benzene	ND	0.048	mg/Kg	1	11/11/2015 6:33:25	PM 22278
Toluene	ND	0.048	mg/Kg	1	11/11/2015 6:33:25	PM 22278
Ethylbenzene	ND	0.048	mg/Kg	1	11/11/2015 6:33:25 I	PM 22278
Xylenes, Total	ND	0.095	mg/Kg	1	11/11/2015 6:33:25	PM 22278
Surr: 4-Bromofluorobenzene	110	80-120	%REC	1	11/11/2015 6:33:25	PM 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 6 of 14
	ND	Not Detected at the Reporting Limit	Р	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.

Project:

1511383-007

Lab ID:

CLIENT: Yates Petroleum Corporation Client Sample ID: S4-1' Belco AIA-Federal Battery Collection Date: 11/5/2015 10:20:00 AM Received Date: 11/10/2015 9:20:00 AM Matrix: SOIL

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	3200	150	mg/Kg	100	11/19/2015 10:49:17 /	AM 22376
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	11/11/2015 3:59:22 P	M 22273
Surr: DNOP	85.5	70-130	%REC	1	11/11/2015 3:59:22 P	M 22273
EPA METHOD 8015D: GASOLINE RAN	GE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	11/12/2015 3:32:31 P	M 22278
Surr: BFB	84.8	75.4-113	%REC	1	11/12/2015 3:32:31 P	M 22278
EPA METHOD 8021B: VOLATILES					Analys	st: NSB
Benzene	ND	0.048	mg/Kg	1	11/12/2015 3:32:31 P	M 22278
Toluene	ND	0.048	mg/Kg	1	11/12/2015 3:32:31 P	M 22278
Ethylbenzene	ND	0.048	mg/Kg	1	11/12/2015 3:32:31 P	M 22278
Xylenes, Total	ND	0.095	mg/Kg	1	11/12/2015 3:32:31 P	M 22278
Surr: 4-Bromofluorobenzene	107	80-120	%REC	1	11/12/2015 3:32:31 P	M 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 7 of 14
	ND	Not Detected at the Reporting Limit	Р	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: S4-2'

 Project: Belco AIA-Federal Battery
 Collection Date: 11/5/2015 10:25:00 AM

 Lab ID: 1511383-008
 Matrix: SOIL

 Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF Date Analyzed Batch
EPA METHOD 300.0: ANIONS				Analyst: LGT
Chloride	2400	75	mg/Kg	50 11/19/2015 11:01:41 AM 2237
EPA METHOD 8015M/D: DIESEL RANG		S		Analyst: KJH
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1 11/11/2015 4:20:34 PM 2227
Surr: DNOP	107	70-130	%REC	1 11/11/2015 4:20:34 PM 2227
EPA METHOD 8015D: GASOLINE RAN	GE			Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1 11/12/2015 3:55:53 PM 2227
Surr: BFB	85.8	75.4-113	%REC	1 11/12/2015 3:55:53 PM 2227
EPA METHOD 8021B: VOLATILES				Analyst: NSB
Benzene	ND	0.048	mg/Kg	1 11/12/2015 3:55:53 PM 2227
Toluene	ND	0.048	mg/Kg	1 11/12/2015 3:55:53 PM 2227
Ethylbenzene	ND	0.048	mg/Kg	1 11/12/2015 3:55:53 PM 2227
Xylenes, Total	ND	0.096	mg/Kg	1 11/12/2015 3:55:53 PM 2227
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1 11/12/2015 3:55:53 PM 2227

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Η	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 8 of 14
	ND	Not Detected at the Reporting Limit	Р	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.

**Project:** 

Lab ID:

1511383-009

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S5-1' Belco AIA-Federal Battery Collection Date: 11/5/2015 10:57:00 AM Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM Result **RL** Oual Units **DF** Date Analyzed Batch

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: LGT
Chloride	170	30	mg/Kg	20	11/16/2015 8:04:44 PM	1 22376
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS	S			Analys	t: KJH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	11/11/2015 4:42:03 PM	1 22273
Surr: DNOP	91.4	70-130	%REC	1	11/11/2015 4:42:03 PM	1 22273
EPA METHOD 8015D: GASOLINE RANG	θE				Analys	t: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	11/11/2015 7:43:02 PM	1 22278
Surr: BFB	77.1	75.4-113	%REC	1	11/11/2015 7:43:02 PM	1 22278
EPA METHOD 8021B: VOLATILES					Analys	t: NSB
Benzene	ND	0.047	mg/Kg	1	11/11/2015 7:43:02 PM	1 22278
Toluene	ND	0.047	mg/Kg	1	11/11/2015 7:43:02 PM	1 22278
Ethylbenzene	ND	0.047	mg/Kg	1	11/11/2015 7:43:02 PM	1 22278
Xylenes, Total	ND	0.095	mg/Kg	1	11/11/2015 7:43:02 PM	1 22278
Surr: 4-Bromofluorobenzene	89.9	80-120	%REC	1	11/11/2015 7:43:02 PM	1 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 9 of 14
	ND	Not Detected at the Reporting Limit	Р	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.

Project: Belco AIA-Federal Battery

1511383-010

Lab ID:

**CLIENT:** Yates Petroleum Corporation Client Sample ID: S5-2' Collection Date: 11/5/2015 11:01:00 AM Matrix: SOIL Received Date: 11/10/2015 9:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	880	30	mg/Kg	20	11/16/2015 8:17:09 P	M 22376
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S			Analys	st: KJH
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	11/11/2015 5:03:28 P	M 22273
Surr: DNOP	109	70-130	%REC	1	11/11/2015 5:03:28 P	M 22273
EPA METHOD 8015D: GASOLINE RA	ANGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	11/11/2015 8:06:15 P	M 22278
Surr: BFB	84.8	75.4-113	%REC	1	11/11/2015 8:06:15 P	M 22278
EPA METHOD 8021B: VOLATILES					Analy	st: NSB
Benzene	ND	0.049	mg/Kg	1	11/11/2015 8:06:15 P	M 22278
Toluene	ND	0.049	mg/Kg	1	11/11/2015 8:06:15 P	M 22278
Ethylbenzene	ND	0.049	mg/Kg	1	11/11/2015 8:06:15 P	M 22278
Xylenes, Total	ND	0.099	mg/Kg	1	11/11/2015 8:06:15 P	M 22278
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	11/11/2015 8:06:15 P	M 22278

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	в	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 10 of 14
	ND	Not Detected at the Reporting Limit	Р	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		

Client: Project:		Petroleum Co. AIA-Federal I	1								
Sample ID	MB-22376 SampType: MBLK TestCode: EPA Method 300.0: Anions										
Client ID:	PBS	Batch	ID: 22	376	F	RunNo: 30	0278				
Prep Date:	11/16/2015	Analysis Da	ate: <b>1</b> 1	1/16/2015	S	SeqNo: 92	23310	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-22376	SampT	ype: LC	s	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 22	376	F	RunNo: 30	0278				
Prep Date:	11/16/2015	Analysis D	ate: 11	1/16/2015	S	SeqNo: 92	23311	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.3	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

Page 11 of 14

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

WO#: 1511383 20-Nov-15

	Petroleum Corporat								
Sample ID MB-22273	SampType: M	BLK	Test	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 22	2273	R	tunNo: 30	0150				
Prep Date: 11/10/2015	Analysis Date: 1	1/11/2015	S	eqNo: 9	8894	Units: mg/K	g		
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		110	70	130	Sel de complete de complete de la comp		
Sample ID LCS-22273	SampType: L	cs	Tes	tCode: EF	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch ID: 22	2273	R	RunNo: 30	0150				
Prep Date: 11/10/2015	Analysis Date: 1	1/11/2015	S	eqNo: 9	18897	Units: mg/k	ζg		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55 10	50.00	0	111	57.4	139			
Surr: DNOP	6.1	5.000		121	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

Page 12 of 14

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

WO#: 1511383 20-Nov-15

Client:	Yates P	etroleum Co	rporati	on							
Project:	Belco A	IA-Federal 1	Battery								
Sample ID	MB-22278	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 22	278	F	RunNo: 3	0159				
Prep Date:	11/10/2015	Analysis D	ate: 1	1/11/2015	S	eqNo: 9	19299	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	je Organics (GRO)	ND 860	5.0	1000		85.9	75.4	113			
Sample ID	LCS-22278	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batch	ID: 22	278	F	RunNo: 3	0159				
Prep Date:	11/10/2015	Analysis D	ate: 1	1/11/2015	5	SeqNo: 9	19300	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	ge Organics (GRO)	25	5.0	25.00	0	100	79.6	122			
Surr: BFB		940		1000		93.5	75.4	113			
Sample ID	MB-22292	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batch	ID: 22	292	F	RunNo: 3	0202				
Prep Date:	11/11/2015	Analysis D	ate: 1	1/12/2015	5	SeqNo: 9	20272	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		840		1000		83.6	75.4	113			
Sample ID	LCS-22292	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gasc	line Rang	e	
Client ID:	LCSS	Batch	ID: 22	292	F	RunNo: 3	0202				
Prep Date:	11/11/2015	Analysis D	ate: 1	1/12/2015	S	SeqNo: 9	20273	Units: %RE	с		
Analyte		Result	PQL		SPK Ref Val			HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		910		1000		91.0	75.4	113			

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

Page 13 of 14

1511383 20-Nov-15

WO#:

-

Client: Project:		etroleum Co IA-Federal									
	Beico A	IA-rederat	Dattery								
Sample ID	MB-22278	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batcl	n ID: 22	278	F	RunNo: 3	0159				
Prep Date:	11/10/2015	Analysis E	Date: 11	1/11/2015	S	SeqNo: 9	19328	Units: mg/H	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050			and an and a statement		and the second			and a subscription of the second
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Brom	ofluorobenzene	1.1		1.000		109	80	120			
Sample ID	LCS-22278	Samp	Гуре: LC	s	Tes	tCode: El	PA Method	8021B: Vola	tiles		TOTOL CONTRACTOR
Client ID:	LCSS	Batc	h ID: 22	278	F	RunNo: 3	0159				
Prep Date:	11/10/2015	Analysis [	Date: 1	1/11/2015	5	SeqNo: 9	19330	Units: mg/ł	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.96	0.050	1.000	0	96.4	80	120			177 200 m 1. (
Toluene		0.94	0.050	1.000	0	94.2	80	120			
Ethylbenzene		0.99	0.050	1.000	0	98.8	80	120			
Xylenes, Total		3.0	0.10	3.000	0	101	80	120			
Surr: 4-Brom	nofluorobenzene	1.2		1.000		116	80	120			
Sample ID	MB-22292	Samp	Гуре: МВ	3LK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 22	292	F	RunNo: 3	0202				
Prep Date:	11/11/2015	Analysis [	Date: 1	1/12/2015	:	SeqNo: 9	20287	Units: %RE	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.1		1.000		107	80	120			
Sample ID	LCS-22292	Samp	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: 22	292	1	RunNo: 3	0202				
Prep Date:	11/11/2015	Analysis I	Date: 1	1/12/2015	2	SeqNo: 9	20288	Units: %RE	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bron	nofluorobenzene	1.1		1.000		113	80	120			

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

WO#: 1511383

Page 14 of 14

20-Nov-15

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 305-345-3975 FAX: 505-345-4107 Websue: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: Yates Petroleum C	orpora Work Order Number:	1511383		RcptNo: 1	
Received by/date. JA	11/10/15				
Logged By: Ashley Gallegos	11/10/2015 9:20:00 AM	1	FA		
Completed By Ashley Gallegos	11/10/2015 9:45:51 AM	1	A		
Reviewed By (15	11/10/15		V		
Chain of Custody					
1. Custody seals intact on sample b	ottles?	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	e samples?	Yes 🖌	No 🗌	NA	
5. Were all samples received at a to	emperature of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗔	
6. Sample(s) in proper container(s)	?	Yes 🗸	No		
7. Sufficient sample volume for indi	cated tesl(s)?	Yes 🗹	No 🗔		
8. Are samples (except VOA and O	NG) properly preserved?	Yes 🔽	No 🗔		
9. Was preservative added to bottle	15?	Yes	No 🗹	NA	
10. VOA vials have zero headspace	?	Yes 🗌	No 🗌	No VOA Viais 🔽	
11. Were any sample containers rec	eived broken?	Yes	No 🗸	# of preserved	
10 m	In <sup>12</sup>	Yes 🖌	No 🗌	bottles checked for pH:	
<ol> <li>Does paperwork match bottle lat (Note discrepancies on chain of</li> </ol>		105 .	ETC Land		>12 unless not
13. Are matrices correctly identified		Yes 🗸	No 🗌	Adjusted?	
14. Is it clear what analyses were re		Yes 🔽	No 🗌		
15. Were all holding times able to be (If no, notify customer for author		Yes 🔽	No 🗔	Checked by:	
Special Handling (if applical	b/e)				
16. Was client notified of all discrep		Yes 🗌	No 🗌	NA 🔽	
Person Notified:	Date	ann maraithristeonnach mhruit i smiriainn	Gently standing in president and an initial table of particular to the standard of particular to the		
By Whom:	Via:	🔄 eMail	🗌 Phone 🔝 Fax	In Person	
Regarding	an a	2003 ACCESSION OF PERSONNEL AND AN ADDRESS OF ADDRESS OF			
Client Instructions:	Residential and Appling Control Basel (ASB) (ASB				
17. Additional remarks:					
18. Cooler Information					
	ndition Seal Intact Seal No	Seal Date	Signed By		

HALL ENVIRONMENTAL	LABORATORY		7109	20				(I			, Air Bubble													and a second s	
NO	ABO	www.hallenvironmental.com	Albuquerque, NM 87109	Fax 505-345-4107	iest				(AC	A COMPANY OF THE OWNER	8260B (VC 8260B (VC	-		+		_		+			+				
IR	L V	menta	erque	505-	Requ	and the second	www.com.com	otomoreter an			itse9 1808														
ž	ANALYSIS	nviron	Ibuqu	Fax	Analysis Request	(*05	μO4,	<sup>z</sup> Ol			N 8 ARDA Anions (F,	×	×	×	×	×	×	×	×	×	×		-		
-	E	haller.		22	Ana			(			AN9) 0168			-	+	+	-		+			5.14 (10 (10 <b>1</b> 0 (10 (10 (10 (10 (10 (10 (10 (10 (10 (1			
IAI	N	www	ins N	45-39	STIL S	atabla norei viore					ED8 (Weft														
	_		4901 Hawkins NE	Tel. 505-345-3975	111	(1050	CLICEP				TPH (Meth training the the the the the the training the t		_	_	-+	_	_	_	_	_		_			
			4901	Tel.			-			A LOC DOWNER WHEN	BTEX + M	×	×	×	×	×	×	×	×	×	×		Remarks:		
	П					(12	:08) \$	8.87	11 +	18E	BTEX + M	×	×	×	×	×	×	×	×	×	×		Rem		
			ral Battery		1719		50		O No	7 and the factor of the	HEAL No.	100.	100-	-1703	- 201	-002	400-	100 -	200-	600-	- 010		, Date Time	11/10/13 0920	Date Time
Ime:	🗆 Rush		Belco AIA Federal Battery		30-025-33719	Jer.	Chase Settle PO # 205_0750	Checo Cotto	A Yes	perature: 7	Preservative Type	ICE	ICE	GE	CE	ICE	ICE	ICE	ICE	ICE	ICE			Peler ?	
urn-Around	X standard	Project Name:	Be	Project #:		Project Manager			On lce:	Sample Temp	Container Type and #	1 - 402.		1 - 402.	1 - 402.	1 - 402.	1 - 402.	1 - 402.	1 - 402.	1 - 402.	1 - 4oz.		Received by:		Received by:
Chain-of-Custody Record	Yates Petroleum Corporation			88210	6537	petroleum.com	T t and A Full Walidation				Sample Request ID	S1-1'	S1-2'	S2-1'	S2-2'	S3-1'	S3-2'	S4-1'	S4-2'	S5-1.	S5-2'		A PE	5	ed by:
of-Cu	etroleum (			)5 South 4th Street Artesia, NM	575-703-6537	csettle@			Other		Matrix	8:46 Soil	8.49 Soil	8:56 Soil	9:01 Soil	9:35 Soil	9:41 Soil	Soil	Soil	Soil	Soil		Dalinwichard N.E.	J.	Relinquished by:
hain-	Yates P		ailing Address:	th 4th S		nail or Fax#:	A/QC Package:	gard	ation:	EDD (Type)	Time							-					is my		Time:
ΰ	ient		ailing	)5 Sou	one #:	nail or	AQC F	Standard	coreditation:		Date	UE0045	16/2015	15/2015	1/5/2015	1/5/2015	1/5/2015	1/5/2015	1/5/2015	1/5/2015	1/5/2015		iete	10	

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

з



December 02, 2015

CHASE SETTLE YATES PETROLEUM CORPORATION 105 S 4th Street Artesia, NM 88210

RE: BELCO AIA FEDERAL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/24/15 11:00.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited 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.

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,

Celeg D. Keine

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

#### Sample ID: S2-3' (H503110-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	12/01/2015	ND	416	104	400	0.00	

#### Sample ID: S2-4' (H503110-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	12/01/2015	ND	416	104	400	0.00	

# Sample ID: S2-5' (H503110-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP			nin sana sana pinasanyan katalarang		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	12/01/2015	ND	416	104	400	0.00	

### Sample ID: S2-6' (H503110-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP	1111 (1111 - 111 (111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111 - 111				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successoria arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall note perforduced except in full with written approval of Cardinal laboratories.

Celleg Di Keene-

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

# Sample ID: S2-7' (H503110-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories,

Celeg Differne-

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 SM4500CI-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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any dairn arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine-

Celey D. Keene, Lab Director/Quality Manager

	Relinquished by:	Relinquished by:		Relinquist	special in								S	R		LAB # (lab use only)			(lab use only)							6	R
	ad by:	ed by:	Y	thy:	special instructions:					1-70	0-20		C3-21	S2-4'	S2-3'	FIELD CODE	-	· + + 7.02 = 0	only)	Sampler Signature:	Telephone No: 575-748-4171	City/State/Zip: Artesia, NM 88210	Company Address: 105 South 4th Street	Comp: (505) 393-232? Yates Petroleum Corporation	Project Manager: Chase Settle	101 East Marland, Hobbs, NM 88240	ADDINIAL I ADODATODIC
	Date	Date	11-24-15	Date														A COMPANY OF A COM		ľ		88210	h Street	um Corporat		<b>S</b> M 88240	i
	Time	Time	1	Time												Beginning Depth								9			
	ē											Τ	T			Ending Depth	1										
	Received by ELOT:	Received by:	AND	Perceivert						11/5/2015	11/5/2015	11/5/2015	11/0/2010	11/5/0015	11/5/2015	Date Sampled										(505) 393-23;	
			IN LA							9:26 AM	9:21 AM	9:16 AM	9.11 MIVI	0-11 \	9:07 AM	Time Sampled				e-mail;	- Fax No:					(505) 393-2326 FAX (505) 393-2476	
12 1			2				-			-	-	-	+			Field Filtered Total #. of Containers					Im					3-247	
		1	G.								+	$\top$	+			Ice	h			csettle@yatespet	575-748-4131					o	
						_										HNO3	Pres			tle	48-4						
						_	_			-	-			_	-	HCI	Preservation & # of Con			DY2	131						
1					-	-	-				-	-	+	+	-	H <sub>2</sub> SO <sub>4</sub>	5n & #			ites							ę
					ł			+	+-	-	+-	-	+	╉	-+	NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	of Co			pet							CHAIN
		F			I					×	×	×	×	5	-	None	ntainers										Q,
	Date	Date	Date													Other ( Specify)	ß			nn							2
			LUN CINS							s	s	s	s	U	n	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Matrix			oleum.com	Report Format:	1	I	I	1		OF CUSTODY RECORD AND ANALYSIS REQUEST
	me	lime	Time												_	TPH: 418.1 8015M 8015E	3	Т		l	A Fo		Proj	U.	Project Name:		RE
ਜ		SC		< 0	F		_	_	-						T	TPH: TX 1005 TX 1006					rma	P	Project Loc:	Project #:	ct Na		СОЛ
empe	b s	amp	abels on container(s) Custody seals on cont	OCs	abo				_				-	+		Cations (Ca, Mg, Na, K)					TT .	PO #	Loc:	ct #:	ame:		30
Pratu	Cou	le Ha	dy se	Free Free	rator	-		-					┝	+	-	unions (CI, SO4, Alkalinity)	_	TOTAL:			×	205					ND
re U	nier?	and [	cont eals	e of	2	+	+				-		┢	+		AR / ESP / CEC		OTAL:			x Standard	205. 0750					AN
pon	Clier	Deliv	ainer on o	ners Head	m			-	-				-	+		fetals: As Ag Ba Cd Cr Pb Hg Se folatiles	_	_	Ana		dard	8	œ		œ		AL
Temperature Upon Receipt:	by Sampler/Client Rep. by Courier? UPS	Sample Hand Delivered	r(s) ontai	Sample Containers Intact? VOCs Free of Headspace?	Laboratory Comments:								1	+-		emivolatiles	+	+-	Analyze For:				elco		Belco		YSIS
jipt:		(s)	Labels on container(s) Custody seals on container(s)	%? Cl?	*									T		TEX 8021B/5030 or BTEX 8260	+	+	For:				AIA		AIA		RE
0	무			Sel.	-										R	CI					Ц Д				Fe		20
Y)	7				-			_	-						-	.O.R.M.					TRRP		Federal		Federal Battery		ES
8,58	ed C	4R	AR	RR						×	×	×	×	×		hlorides				5			Ba		al B		T
S	-	Y	M	NY				-	+					+-	S	AR							Battery		atter		
ဂံ	N Lone Star	zz	zz	z z	F		+	+			-			+	R	USH TAT (Pre-Schedule) 24, 48,	70.0				NPDES		~		×		
	ä	The second se			T					×	×	×	×	×		andard TAT	. 721	irs			N T				Page	5 of 5	
											k	-	-	1									ant an		aye	5015	



December 02, 2015

CHASE SETTLE YATES PETROLEUM CORPORATION 105 S 4th Street Artesia, NM 88210

**RE: BELCO AIA FEDERAL BATTERY** 

Enclosed are the results of analyses for samples received by the laboratory on 11/24/15 11:00.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited 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.

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,

Celeg D. Keine

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:	11/24/2015	Sampling Date:	11/05/2015	
Reported:	12/02/2015	Sampling Type:	Soil	
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)	
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia	
Project Location:	BELCO AIA FEDERAL BATTERY			

#### Sample ID: S3-3' (H503111-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP			and the second		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	12/01/2015	ND	416	104	400	0.00	

## Sample ID: S3-4' (H503111-02)

Chloride, SM4500CI-B	mg	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	12/01/2015	ND	416	104	400	0.00	

#### Sample ID: S3-5' (H503111-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	560	16.0	12/01/2015	ND	416	104	400	0.00	

### Sample ID: S3-6' (H503111-04)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thiting (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based unover stated reasons or otherwise. Results relate only to the samples identified above. This reproduced exception inful luboration. In Juny to the sample identified above. This reproduced exception inful luborations.

Celey Diffeene-

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

#### Sample ID: S3-7' (H503111-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP		un and an and a state of the North State	ad an an an or or or of all produced in		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEXES NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by claims, including those for negligence and induing, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subliaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such climits based upon any of the biove stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with writen approval of Cardinal Laboratories.

Celez D. Kene

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 SM4500CI-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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories,

Celeg D. Keene\_

Celey D. Keene, Lab Director/Quality Manager

elinguished by: Date U-24-15 Jinquished by: Date Date	pecial Instructions:				5 S3-7'	4 S3-6'	3 S3-5	X S3-4'	LAB # (lab use only)	ORDER # 1503111-	Sampler Signature:	Telephone No: 575-748-4171	City/State/Zip: Artesia, NM 88210	Company Address: 105 South 4th Street	Comp; (505) 393-232? Yates Petroleum Corporation	Project Manager: Chase Settle
Time Time		++		+	-	+	+	-	Beginning Depth		<i>'</i>				0 N	
Received	++	++		+-	-	-	$\vdash$	-	Ending Depth							
Received by: Received by: Received by ELOT:				11/5/2015	11/5/2015	11/5/2015	11/5/2015	11/5/2015	Date Sampled							(505) 393-4
J La				10:08 AM	10:05 AM	10:00 AM	9:53 AM	9:48 AM	Time Sampled		e-mail:					(505) 393-2326 FAX (505) 393-2476
2		++	+		_	-	-	-	Field Filtered		.≓ <u>0</u>					) 393-:
							-	-	Total #. of Containers	-	CSE					2476
		$\left  \right $	+	$\rightarrow$	$\downarrow$	-			HNO3	Pres	<u>575-748-4131</u> Rej <u>csettle@yatespetroleum.com</u>					
			++	+	+	+	+	-	HCI H <sub>2</sub> SO <sub>4</sub>	Preservation & # of C	4131 @ya					
									NaOH	5 00 #2	ites					Q
E			+								petr					HAIN
Date Date			Ľľ	< >	->	4	$\langle \rangle$		None Dther ( Specify)	ainare	olet					IOF
					T	1	1	other Designation of the local division of t	W=Drinking Water SL=Sludge	4	Im.o					CUS
			Ű	s lo	S.	0	0		W = Groundwater S=Soil/Solid	Mont.	Rep					τοι
Time	++					T			PH: 418.1 8015M 8015B	+	Report Format:		Pr		Pro	DYR
Sar Sar				+	+-	-	-		PH: TX 1005 TX 1006		orma	- 11	Project Loc:	Proje	Project Name:	ECO
Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace? Labels on container(s) Custody seals on cooler(s) Sample Hand Delivered by Sampler/Client Rep. ? by Courter? UPS DF				-	+	+	+		ations (Ca, Mg, Na, K) ions (Cl, SO4, Alkalinity)			PO #:	Loc:	Project #:	lame	RD,
ory Conta Conta Conta Conta Seals Seals Seals Seals Seals	++								R / ESP / CEC	TCLP: TOTAL:	×	205			Ä	AND
ainer Hea on c Deliv Clie	++	++		-				Me	tals: As Ag Ba Cd Cr Pb Hg Se		× Standard	. 0750				AN
nents Inta s Inta dspac dspac dspac dspac dspac nta nta ered ered ered ered ered ered		++		+	┢	-		-	atiles nivolatiles	Analyze	ard		Belco		Bel	ALY
5.? 5.? 5.?						$\vdash$	+		EX 8021B/5030 or BTEX 8260	Por:			O AIA		Belco AIA	SIS
F ©	+-+-	+						RC	And the second descent and the second d	'			AFe		IAF	REQ
1300000 -		++	×	×	×	×	×	-	.R.M.		TRRP		Federal Battery		Federal	CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST
~ COODOD					-	Ê	Ê	SA			<b></b>		II Ba		al Ba	7
	+	44						T		-11			ttery		Battery	
	++	++		-					ISH TAT (Pre-Schedule) 24, 48, 72	2 hrs	NPDES					
	11		X	X	X	X	X	St	TAT brabna		S S	1			F	Page 5 of 5



December 02, 2015

CHASE SETTLE YATES PETROLEUM CORPORATION 105 S 4th Street Artesia, NM 88210

RE: BELCO AIA FEDERAL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/24/15 11:00.

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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited 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.

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,

Celeg D. Keine

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

### Sample ID: S4-3' (H503112-01)

Chloride, SM4500CI-B	loride, SM4500CI-B mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3560	16.0	12/01/2015	ND	416	104	400	0.00	

## Sample ID: S4-4' (H503112-02)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP		Optimistic construction and the state			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3840	16.0	12/01/2015	ND	416	104	400	0.00	

### Sample ID: S4-5' (H503112-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP			an a		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	12/01/2015	ND	416	104	400	0.00	

#### Sample ID: S4-6' (H503112-04)

Chloride, SM4500CI-B	Chloride, SM4500CI-B mg/kg		Analyzed By: AP					98.40	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2520	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incidental by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall note be reproduced exception in full with mitten approval of Cardinal Laboratories.

Celeg D. Keine-

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

# Sample ID: S4-7' (H503112-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by claims, including those for angligence and induding, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such climins based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall note performance of the cervice.

Celeg Di 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 SM4500CI-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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene .-

Celey D. Keene, Lab Director/Quality Manager

Q
HAIN
0F
SUS
570
AAG
ECO
ORD
AND
AN
ALY
SIS
REQ
UES
1

	-A-			T	T	T	- T				<b></b>	1	T		0	() 									
Relinquished by:	Relinquished by	Relinquis	Special Instructions.					(5	2	(	0		LA	AB # (lab use only)	ORDER #	(lab use only)								H	Ø
uishe	uishe	Uis a		-	$\left  - \right $			S	1s	SS	S	S	1-		R#	only	S			2	8	20	Pr	X	
d by	dby	- by	ů					S4-7	S4-6"	S4-5'	S4-4'	S4-3'				-	Sampler Signature:	achi	Telephone No:	City/State/7in.	Company Address:	Comp: (505) 393-2326 Yates Petroleum Corporation	Project Manager:		-
	\$	14													+	-	er	C.		tate.	any	: (50	tMa	10	AR
		1	0	•											T		Sign		N	Z	Ad	5) 3	ana	101 East Marland, Hobbs, NM 88240	ARDINAL LABORATORIES
													-		90		latu	5			dres	93-2	ger:	st Ma	
														i	Q'		V.	1	а. IS			326)	10	arlan	AB
													FIELD CODE		15/12	-			575-748-417	Artesia. NM 88210	105 South 4th Street	rates	Chase settle	L L	ORA
															0		Ĩ		748-		Sout	Pe	e ve	sddc	TO
															2	1	n'	1	417	2	h 4th	role	ame	NN	RES
		11															K	$\langle \rangle$	-	882	Str	m		88	
Date	Date	Date //-24-5															٩			5	et	orp		40	
ite	te	ल ह																				oratio			
				-			-+	+	+	+	+	+		Beginning Depth	1							A			
Time	Time	Time								1	_	-	-	segmining Depth	-										
ne	ne	ne											E	Ending Depth										0	
Re	Re	Re								-	-	1												505	
ceive	Received by	Received						1/5/	1/5/	15/	15/	101		Date Sampled										393	
d by	Coy							11/5/2015	11/5/2015	11/5/2015	11/5/2015	CL07/9/LLL												-232	
Received by ELOT:		Z		-					-	+	Ť	Ĩ	+		-		I		1					26 F/	
3		D						10	10	10	ī	d	5											ې د ا	
	0	4						10:46 AM	10:43 AM	10:39 AM	10:35 AM	10.29 MIN		Time Sampled			9	2	Fax No:					505)	
		,						AM	A	MM			2				enian.		No:					393	
		10		F									F	Field Filtered					Len.					(505) 393-2326 FAX (505) 393-2476	
Star.		Z	-					-	-	-	-	-	-	Total #. of Containers	+		000	controleum.com	575-748-4131					0.	
		à				-			_	_	_	_	_	Ice	- P			# D	48-						
		furcia		-		_			_	_	_	-	_	HNO <sub>3</sub>	- eserv			)	4131						
		3		-	_					+	-	+		HCI H <sub>2</sub> SO <sub>4</sub>	ation		5	in the							Q
				-		+-		+	+	+	+	+		NaOH	Preservation & # of Cor			5							CHAIN C
				-	_	_	+			+	+	-		Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>				Ptro							
		-	-		-+-	+	+	->	< >	$\langle \rangle$	< ;	< :	×	None	tainers			P							T C
		10	0		-	1								Other ( Specify)	Ľ			3							US I
Date	Date	R	ate	Ì					Т			Т		DW=Drinking Water SL=Sludge	M			8	70						Q
No.		TA						0	0 0	0 0	n	0	S	GW = Groundwater S=Soll/Solid	Matrix		1	3	epor					P	N N
		E	-				┽┥	+	_	+	+	+		NP=Non-Potable Specify Other TPH: 418.1 8015M 80	15B	Т	П		Report Format:		Project Loc:		P	Project Name:	EC
d		Ö	me					+	-	-	-			TPH: TX 1005 TX 1006					rma	P	et L	1	Project #:	t Na	
	1 9	000	5 5 9	25	-	+			-	-	-	-		Cations (Ca, Mg, Na, K)					a.	PO #:	000		#	me:	A
emp	by	usto	DCs	bor		-	-	-			1			Anions (CI, SO4, Alkalinity)		10			×	205					0
A at	Cou	dy se	Free	ator										SAR / ESP / CEC	and the second second second	TOTAL:			Star	205.0750					HIN.
the star	by Sampler/ by Courier?	bals (	of F	Y Co										Metals: As Ag Ba Cd Cr Pb Hg	g Se		B		× Standard	00	a	,		Be	É
L B	Clier	on o	lead	mm										Volatiles		$\square$	Analyze		-		Belco			8	010
Temperature Upon Receipt	by Sampler/Client Rep. ? by Counier? UPS	Custody seals on container(s) Custody seals on cooler(s)	VOCs Free of Headspace? Labels on container(s)	Laboratory Comments:						_				Semivolatiles	260	++	- For				AIA			Belco AIA Federal Battery	IF CUSTODY RECORD AND ANALTSIS INTRODO
eipt	, o	(s)		5 "			_		_		_			BTEX 8021B/5030 or BTEX 8 RCI	200		-							Fee	i i i i i i i i i i i i i i i i i i i
	F	S				+			+					N.O.R.M.			+		TRRP		reverar battery	1000		dera	Ģ
S.	П								×	×	×	×	×	Chlorides			1				0	D		B	
()		RARA	AA	3	$\vdash$	+				-	-		<b>F</b>	SAR							allo	the		tter	
8.63	5								-				1	n de la sense de la sense de la dela de la dela de la sense de					NPDES		Y	-		×	
ĉ	N Lone Star	z z 2	zz	z										RUSH TAT (Pre-Schedule)	24, 48,	72 hrs			DES			-	L		
	a,								×	×	×	×	×	Standard TAT									Ра	ge 5 of	15



December 02, 2015

CHASE SETTLE YATES PETROLEUM CORPORATION 105 S 4th Street Artesia, NM 88210

RE: BELCO AIA FEDERAL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 11/24/15 11:00.

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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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.

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,

Celeg D. Keine

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

# Sample ID: S5-3' (H503113-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					www.comercement.com
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	12/01/2015	ND	416	104	400	0.00	

### Sample ID: S5-4' (H503113-02)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10700	16.0	12/01/2015	ND	416	104	400	0.00	

#### Sample ID: S5-5' (H503113-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP	enter a companya de la companya de l				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2880	16.0	12/01/2015	ND	416	104	400	0.00	

#### Sample ID: S5-6' (H503113-04)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1840	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg Differne -

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:	11/24/2015	Sampling Date:	11/05/2015
Reported:	12/02/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	BELCO AIA FEDERAL BATTERY		

# Sample ID: S5-7' (H503113-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3200	16.0	12/01/2015	ND	416	104	400	0.00	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of uso, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated resons or otherwise. Results relate only to the samples identified above. This reprodued exception in full with writen approval of Cardinal Laboratories.

alig Differe-

Celey D. Keene, Lab Director/Quality Manager



## Notes and Definitions

5

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 SM4500CI-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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleg Differre-

Celey D. Keene, Lab Director/Quality Manager

	Relinquished by:	Relinquished by:	Relinquish	opecial II					C	n	Z	20	4	LAB # (lab use only)	ORDER #:							<b>Real</b>
	ad by:		ed by:						00-1	00-0		35-4 57 5	S5-3	FIELD CODE	an 1503113		Telephone No: 575-748-4171	City/State/Zip: Artesia, NM 88210	Company Address: 105 South 4th Street	Comp: (505) 393-232€ Yates Petroleum Corporation	Project Manager: Chase Settle	ARDINAL LABORATORIES 101 East Mariand, Hobbs, NM 88240
	Date	11-24-15 Date	Date															8210	Street	im Corporatio		88240
	Time	Time	Time											Beginning Depth						ğ		
														Ending Depth								
	Received by ELOT:	Received by:	Received by:						11/5/2015	11/5/2015	11/5/2015	11/5/2015	11/5/2015	Date Sampled			14					(505) 393-233
	0	A A							11:21 AM	11:17 AM	11:13 AM	11:09 AM	11:05 AM	Time Sampled		e-mail:	- Fax No:					(505) 393-2326 FAX (505) 393-2476
		YY'				-			-	-	-	-		Field Filtered			100,000					93-247
		8							-	-	F	1	-	Total #. of Containers	+	<u>csettle@yatespet</u>	575-748-4131					76
		8									T			HNO <sub>3</sub>	Pre	ttle	48-4					
														нсі	Preservation & # of Co	(a) Y	1131					
					_	_		_	_					H <sub>2</sub> SO <sub>4</sub>	on &	ate						Q
					_		-+		+	+	-		-	NaOH	ofC	spe						CHAIN
									×	×	×	×	×	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> None	ontainers							V Q
Uale		2025	5								Í.	1	-	Other ( Specify)	ers	eur						Ē
à									T	T	Τ	$\square$		DW=Drinking Water SL=Sludge		roleum.com	I	1	1	1	I	JST
		2							S	S	S	S	S	GW = Groundwater S=Soil/Solid	Matrix	mo	Rep					o do
lime			4			$\neg$			+-	$\vdash$	┢─		-	NP=Non-Potable Specify Other TPH: 418.1 8015M 8015			Report Format:		Pro		Project Name:	RE
		8	-						+			-	-	TPH: TX 1005 TX 1006			orm		Project Loc:	Project #:	ect N	ŝ
+ a	odil.	Cus	Voc	Lab							1			Cations (Ca, Mg, Na, K)			at:	PO #:	5	ect #	łam	RD
pera	by Courier? UPS	Labels on container(s) Custody seals on conta Custody seals on code	s Fi	Laboratory Comments:										Anions (CI, SO4, Alkalinity)			×			#	.e.	AN
ture	ample	seal seal	Cont	Ş.	_	-+								SAR / ESP / CEC	TCLP:		× Standard	205. 0750	R T			DA
dpo	2 ar/Cli	son	aine f He	ŝ	+	_		_						Metals: As Ag Ba Cd Cr Pb Hg Se		P	Inda	750	m		_	NAL
n Re	ent Rep UPS	cont s	adsp	Ber	+	-+								Volatiles		Analyze	đ		Belco		Belc	SK
Temperature upon Receipt:	by Sampler/Client Rep. ? by Courier? UPS	Labels on container(s) Custody seals on container(s) Custody seals on cooler(s)	Sample Containers Intact? VOCs Free of Headspace?	ts:		-+		+-	+					Semivolatiles		PFOT	<b></b>		o AIA		o Al	OF CUSTODY RECORD AND ANALYSIS REQUEST
	PHL	(s)		t		-		-	1	-				BTEX 8021B/5030 or BTEX 8260 RCI			Ц		TI		AF	λEQ
U				T										N.O.R.M.			TRRP		ederal		ede	UE
())	Feder	m	3						×	×	×	×	×	Chlorides			v		a E		alE	\$7
308	R.A.A.	av	1993	1										SAR			Π		Battery		Belco AIA Federal Battery	
റ്	one Star	zzz	zz	+	+	+	_					-					NPDES		Z		Ž	
.,	Star			ŀ	+	+						_		RUSH TAT (Pre-Schedule) 24, 4	8, 72 hrs	]	DES					
		100 200	E SA						×	×	×	×	×	Standard TAT						F	age	5 of 5



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

January 08, 2016

Chase Settle Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210 TEL: (575) 748-4111 FAX

RE: Belco AIA Federal Battery

OrderNo.: 1512B04

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 10 sample(s) on 12/23/2015 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 <u>www.hallenvironmental.com</u> 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 qualifers 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,

andig

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environ	mental Analysis		Date Reported: 1/8/2016			
	ates Petroleum Corpor Belco AIA Federal Batte				Lab Order: 1512B04	
Lab ID:	1512B04-001		(	Collection	Date: 12/18/2015 7:28:00 AM	
Client Sample ID:	S5-10'			Μ	atrix: SOIL	
Analyses		Result	RL Qual	Units	DF Date Analyzed Batch ID	
EPA METHOD 300	0.0: ANIONS				Analyst: LGT	
Chloride		8400	300	mg/Kg	200 1/5/2016 9:14:14 PM 23059	
Lab ID:	1512B04-002			Collection	Date: 12/18/2015 7:39:00 AM	
Client Sample ID:	S5-15'			Μ	atrix: SOIL	
Analyses		Result	RL Qual	Units	DF Date Analyzed Batch ID	
EPA METHOD 300	0.0: ANIONS				Analyst: LGT	
Chloride		8000	300	mg/Kg	200 1/5/2016 9:26:39 PM 23059	
Lab ID:	1512B04-003			Collection	Date: 12/18/2015 8:00:00 AM	
Client Sample ID:		Matrix: SOIL				
Analyses		Result	RL Qual	Units	DF Date Analyzed Batch ID	
EPA METHOD 300	0.0: ANIONS	C Contaction Contraction and a second	n an		Analyst: LGT	
Chloride		7000	300	mg/Kg	200 1/5/2016 9:39:03 PM 23059	
Lab ID:	1512B04-004			Collection	Date: 12/18/2015 8:15:00 AM	
<b>Client Sample ID:</b>	S5-25'		22	Μ	latrix: SOIL	
Analyses		Result	RL Qual	Units	DF Date Analyzed Batch ID	
EPA METHOD 300	0.0: ANIONS				Analyst: LGT	
Chloride		4500	150	mg/Kg	100 1/5/2016 9:51:27 PM 23059	

# Hall Environmental Analysis Laboratory, Inc.

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

75

Result

2000

**RL** Qual Units

mg/Kg

Qualifiers:

Lab ID:

Analyses

Chloride

Client Sample ID: S5-30'

**EPA METHOD 300.0: ANIONS** 

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix

1512B04-005

- 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

Collection Date: 12/18/2015 8:30:00 AM

50

**DF** Date Analyzed

1/5/2016 10:03:52 PM

**Batch ID** 

23059

Analyst: LGT

Matrix: SOIL

- E Value above quantitation range
- J Analyte detected below quantitation limits Page 1 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order: 1512B04 Date Reported: 1/8/2016

**Analytical Report** 

					Date Reported. 1/0/2010
	ates Petroleum Corr Belco AIA Federal Ba			I	Lab Order: 1512B04
Lab ID:	1512B04-006			Collection Date	e: 12/18/2015 8:46:00 AM
Client Sample ID:	S5-35'			Matrix	x: SOIL
Analyses		Result	RL Qual	Units	DF Date Analyzed Batch ID
EPA METHOD 300	.0: ANIONS				Analyst: LGT
Chloride		6300	300	mg/Kg	200 1/5/2016 10:41:05 PM 23059
Lab ID:	1512B04-007	in an	an a	Collection Date	e: 12/18/2015 9:05:00 AM
Client Sample ID:	S5-40'			Matrix	x: SOIL
Analyses		Result	RL Qua	l Units	DF Date Analyzed Batch ID
EPA METHOD 300	.0: ANIONS				Analyst: LGT
Chloride		2900	150	mg/Kg	100 1/5/2016 10:53:30 PM 23059
Lab ID:	1512B04-008			Collection Dat	e: 12/18/2015 9:25:00 AM
Client Sample ID:	S5-45'			Matri	x: SOIL
Analyses		Result	RL Qua	l Units	DF Date Analyzed Batch ID
EPA METHOD 300	.0: ANIONS				Analyst: LGT
Chloride		290	30	mg/Kg	20 1/5/2016 3:18:12 AM 23059
Lab ID:	1512B04-009			Collection Dat	e: 12/18/2015 10:43:00 AM
Client Sample ID:	S4-10'			Matri	x: SOIL
Analyses		Result	RL Qua	l Units	DF Date Analyzed Batch ID
EPA METHOD 300	).0: ANIONS				Analyst: LGT
Chloride		780	30	mg/Kg	20 1/5/2016 3:55:27 AM 23059
Lab ID:	1512B04-010			Collection Dat	te: 12/18/2015 10:55:00 AM
Client Sample ID:	S4-15'			Matri	ix: SOIL
Analyses		Result	RL Qua	l Units	DF Date Analyzed Batch ID
EPA METHOD 300	0.0: ANIONS			and a second second second second	Analyst: LGT
Chloride		710	30	mg/Kg	20 1/5/2016 4:07:51 AM 23059

Hall Environmental Analysis Laboratory, Inc.

Analytical Report Lab Order: 1512B04

Date Reported: 1/8/2016

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 Page 2 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Client: Project:		Petroleum Cor AIA Federal E	÷.	on							
Sample ID	MB-23059 SampType: MBLK			TestCode: EPA Method 300.0: Anions							
Client ID:	PBS Batch ID: 23059			RunNo: 31235							
Prep Date:	1/4/2016	Analysis Da	ite: 1/	4/2016	S	SeqNo: 95	56435	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-23059	SampTy	pe: LC	s	Tes	tCode: EF	A Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 23	059	F	RunNo: 31	1235				
Prep Date:	1/4/2016	Analysis Da	ate: 1/	4/2016	5	SeqNo: 9	56436	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.1	90	110			

# Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range
- RL Reporting Detection Limit

WO#: 1512B04

08-Jan-16

Page 3 of 3

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

....

Haff Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TFL: 505-345-3975 FAX: 565-345-4107 Website: www.haffenvironmental com

# Sample Log-In Check List

Client Name Yates	Petroletim Corpora	Work Order Num	ber: 1512B04		ReptNo: 1	
Received by/date:	J-Mi	12:23	15			
Logged By: Ashk	ey Gallegos	) 12/23/2015 9:40:00	AM	Az		
Completed By: Ashle	ey Gallegos	12/23/2015 1.04:41	PM	AZ		
Reviewed By:	05	12/23/15		N		
Chain of Custody	- Anne Sta	1010-1				
1. Custody seals intac	t on sample bottles?		Yes 🗌	No 🗔	Not Present 🖌	
2. Is Chain of Custody			Yes 🔽	No 🗔	Not Present	
3. How was the sample	e delivered?		Couner			
Log In						
4. Was an attempt ma	ide to cool the samp	les?	Yes 🗹	No 🚺		
5. Were all samples re	eceived at a tempera	ture of i>0° C to 6.0°C	Yes 🔽	No 🗌	NA	
6. Sample(s) in prope	r container(s)?		Yas 🗹	No 🗌		
7. Sufficient sample v	olume for indicated t	est(s)?	Yes 🔽	No 🗋		
8, Are samples (except	ot VOA and ONG) pr	operly preserved?	Yes 🗸	No 🗔	50 M	
<ol><li>Was preservative a</li></ol>	dded to bottles?		Yes	No 🗹	NA	
10. VOA viais have zer	o headspace?		Yes	No 🗔	No VOA Vials 🖌	
11. Were any sample	containers received i	oroken?	Yes	No 🖌	# of preserved bottles checked	
12. Does paperwork m			Yes 🔽	No	for pH:	2 unless noted
(Note discrepancie 13. Are matrices corre-	s on chain of custod		Yes 🗸	No 🗍	Adjusted?	
14, is it clear what ana			Yes 🖌	No 🗌		
15. Were all holding tir			Yos 🔽	No 🗌	Checked by:	
Special Handling	(if applicable)					
16. Was client notified	of all discrepancies	with this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notif	ied:	Da	nte		3.47	
By Whom:	private excente sector sector site in the factor of the fa	Vi	a: 🚺 eMail [] I	Phone 🗌 Fax	In Person	
Regarding:		analisto ( ) more provident and a construction of the second		an and the statement of the Property of the statements	ala marana ana minina a para da ang kana mang kana kana da ana ang kana kana mana kana mana kana mana kana man	
Client Instru	ctions.					
17. Additional remark	S:					
18. Cooler Informat			1		E.	
the second s	emp °C Condition	and a second	o Seal Date	Signed By		
1 9.1	B Good	Yes			1	

é ... ----8 þ SCC. If necessary, samples submitted to Hall Environmental may be subcontracted to other