

MARTIN YATES, III  
1913-1985

FRANK W. YATES  
1936-1986

S.P. YATES  
1914-2008



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

JOHN A. YATES  
CHAIRMAN OF THE BOARD

JOHN A. YATES JR.  
PRESIDENT

JOHN D. PERINI  
EXECUTIVE V.P. OF MONETIZATION  
CHIEF FINANCIAL OFFICER

JAMES S. BROWN  
CHIEF OPERATING OFFICER

1RP-3184

**RECEIVED**

*By OCD; Dr. Oberding at 4:10 pm, Apr 15, 2015*

April 15, 2015

Dr. Tomas Oberding  
NMOCD District I  
1625 N. French Drive  
Hobbs, New Mexico 88240

**APPROVED**

Conditionally

*By OCD; Dr. Oberding at 4:17 pm, Apr 15, 2015*

Re: Belco AIA Federal Battery  
30-025-26826  
Section 14, T20S-R32E  
Lea County, New Mexico

Stipulations:

- 1) RP will remain open until site abandonment
- 2) At abandonment, delineation under the liners will be conducted to ensure proper understanding of historic releases, at which point a new depth of excavation will be determined.

Dr. Oberding:

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 July 16, 2014 and August 7, 2014.

**If there are no objections with the scope of work described in the plan, Yates will have a contractor begin work on or after May 1, 2015.**

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

Thank you.

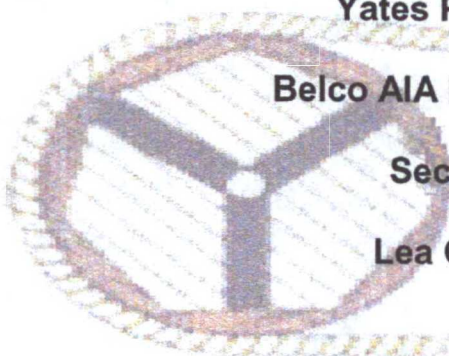
YATES PETROLEUM CORPORATION

Chase Settle  
Environmental Regulatory Agent

Enclosure(s)

KATHY H. PORTER  
SECRETARY

DENNIS G. KINSEY  
TREASURER



**Yates Petroleum Corporation**

**Belco AIA Federal Battery Work Plan**

**Section 14, T20S-R32E**

**Lea County, New Mexico**

**April 15, 2015**



**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 July 16, 2014, Yates submitted to the NMOCD District I office a Form C-141 for the release of 40 B/PW with 30 B/PW recovered. The affected area was approximately 204 feet by 28 feet within the bermed battery and an area of 35 feet by 48 feet south of the bermed battery on the previous release area (this has already been remediated with the 1RP-3337 Work Plan). Prior to any sampling taking place, on August 7, 2014, Yates submitted to the NMOCD District I office a Form C-141 for the release of 35 B/PW with 30 B/PW recovered. The affected area was 116 feet by 25 feet within the bermed battery. Both releases were from failure of the transfer pump flow line causing a release of produced water. Initial delineation samples were taken in the S1 and S2 release areas (08/22/2014) and sent to a NMOCD approved laboratory (09/03/2014, results enclosed). Subsequent sampling was conducted in the S1 and S2 sample area (09/05/2014) and sent to a NMOCD approved laboratory (09/22/2014, results enclosed). Sampling again occurred in the S1 and S2 areas (10/29/2014) and sent to a NMOCD approved laboratory (11/03/2014, results enclosed). Due to elevated chlorides, sampling was again conducted in the S1 area (02/09/2015) and sent to a NMOCD approved laboratory (02/19/2015, results enclosed). No further (deeper) sampling could be conducted due to space restraints of working within tight proximity to the production tanks.

**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'

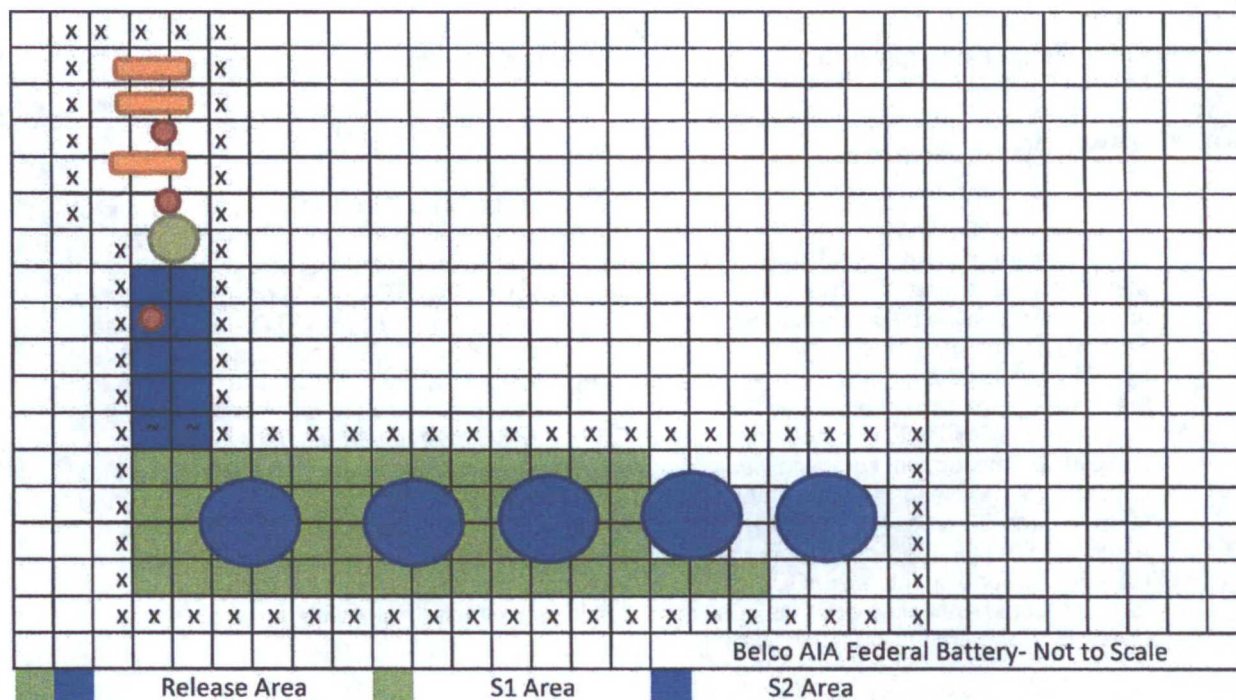
**IV. Soils**

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 and the depth to groundwater (>76'), Yates Petroleum Corporation will excavate six (6) feet of impacted soil within S2 sample area. The S2 sample area will then be backfilled with six (6) feet of clean caliche. Due to it being impracticable to relocate the tanks and battery location, Yates will then install a 20 ml liner under the tanks and up the sidewalls of the berm, converting the battery into a lined earthen bermed battery that will prohibit migration of contaminants downward to groundwater. At the time of Plug and Abandonment, when the tanks and equipment are removed from the battery, Yates will excavate four and a half (4½) feet of impacted soils that were under the liner. All excavated soil will be hauled to a NMOCD approved facility for disposal. Yates Petroleum Corporation will then re-install the 20 ml liner over the S1 release area with six (6) inches of sand above and below the liner for cushion. The remaining excavated area will be backfilled with one and a half (1½) feet of caliche and two (2) feet of like, similar topsoil allowing for vegetative repopulation of the disturbed area and protection from groundwater contamination. 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 and request closure of the site.





H402664	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	Release Area	8/22/2014	Hand Auger	1'	<0.3	<10.0	23.3	12300
S1-2'	Release Area	8/22/2014	Hand Auger	2'	<0.3	<10.0	<10.0	17000
S2-1'	Release Area	8/22/2014	Hand Auger	1'	<0.3	<10.0	<10.0	4640
H402857								
S1-3'	Release Area	9/5/2014	Backhoe	3'	N/A	N/A	N/A	15000
S1-4'	Release Area	9/5/2014	Backhoe	4'	N/A	N/A	N/A	16800
S1-5'	Release Area	9/5/2014	Backhoe	5'	N/A	N/A	N/A	8800
S2-2'	Release Area	9/5/2014	Backhoe	2'	N/A	N/A	N/A	1680
S2-3'	Release Area	9/5/2014	Backhoe	3'	N/A	N/A	N/A	1250
S2-4'	Release Area	9/5/2014	Backhoe	4'	N/A	N/A	N/A	1170
S2-5'	Release Area	9/5/2014	Backhoe	5'	N/A	N/A	N/A	1960
H403347								
S1-6'	Release Area	10/29/2014	Backhoe	6'	N/A	N/A	N/A	1140
S1-7'	Release Area	10/29/2014	Backhoe	7'	N/A	N/A	N/A	5120
S1-8'	Release Area	10/29/2014	Backhoe	8'	N/A	N/A	N/A	1230
S1-9'	Release Area	10/29/2014	Backhoe	9'	N/A	N/A	N/A	3120
S2-6	Release Area	10/29/2014	Backhoe	6'	N/A	N/A	N/A	4400
S2-7'	Release Area	10/29/2014	Backhoe	7'	N/A	N/A	N/A	1040
S2-8'	Release Area	10/29/2014	Backhoe	8'	N/A	N/A	N/A	256
S2-9'	Release Area	10/29/2014	Backhoe	9'	N/A	N/A	N/A	368
H500429								
S1-10'	Release Area	2/9/2015	Backhoe	10'	N/A	N/A	N/A	9200
S1-11'	Release Area	2/9/2015	Backhoe	11'	N/A	N/A	N/A	22800
S1-12'	Release Area	2/9/2015	Backhoe	12'	N/A	N/A	N/A	17400
S1-13'	Release Area	2/9/2015	Backhoe	13'	N/A	N/A	N/A	17800
S1-14'	Release Area	2/9/2015	Backhoe	14'	N/A	N/A	N/A	16600



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: 40 B/PW; Recovered: 30 B/PW Release Date: 07/10/2014

Released: 35 B/PW; Recovered: 30 B/PW Release Date: 08/04/2014



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

September 03, 2014

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 08/28/14 13:00.

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

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 08/28/2014  
Reported: 09/03/2014  
Project Name: BELCO AIA FEDERAL BATTERY  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 08/22/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S1-1' (H402664-01)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2014	ND	1.71	85.6	2.00	10.8	
Toluene*	<0.050	0.050	09/02/2014	ND	1.58	78.9	2.00	10.1	
Ethylbenzene*	<0.050	0.050	09/02/2014	ND	1.76	87.8	2.00	11.2	
Total Xylenes*	<0.150	0.150	09/02/2014	ND	5.24	87.3	6.00	11.1	
Total BTEX	<0.300	0.300	09/02/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12300	16.0	09/03/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/30/2014	ND	177	88.7	200	9.49	
DRO >C10-C28	23.3	10.0	08/30/2014	ND	180	90.0	200	14.2	

Surrogate: 1-Chlorooctane 115 % 65.2-140

Surrogate: 1-Chlorooctadecane 135 % 63.6-154

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, 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: 08/28/2014  
 Reported: 09/03/2014  
 Project Name: BELCO AIA FEDERAL BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Kathy Perez

**Sample ID: S1-2' (H402664-02)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2014	ND	1.71	85.6	2.00	10.8	
Toluene*	<0.050	0.050	09/02/2014	ND	1.58	78.9	2.00	10.1	
Ethylbenzene*	<0.050	0.050	09/02/2014	ND	1.76	87.8	2.00	11.2	
Total Xylenes*	<0.150	0.150	09/02/2014	ND	5.24	87.3	6.00	11.1	
Total BTX	<0.300	0.300	09/02/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIC) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17000	16.0	09/03/2014	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/30/2014	ND	177	88.7	200	9.49	
DRO >C10-C28	<10.0	10.0	08/30/2014	ND	180	90.0	200	14.2	

Surrogate: 1-Chlorooctane 111 % 65.2-140

Surrogate: 1-Chlorooctadecane 134 % 63.6-154

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, 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: 08/28/2014  
Reported: 09/03/2014  
Project Name: BELCO AIA FEDERAL BATTERY  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 08/22/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S2-1' (H402664-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/02/2014	ND	1.71	85.6	2.00	10.8	
Toluene*	<0.050	0.050	09/02/2014	ND	1.58	78.9	2.00	10.1	
Ethylbenzene*	<0.050	0.050	09/02/2014	ND	1.76	87.8	2.00	11.2	
Total Xylenes*	<0.150	0.150	09/02/2014	ND	5.24	87.3	6.00	11.1	
Total BTEX	<0.300	0.300	09/02/2014	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	09/03/2014	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/30/2014	ND	177	88.7	200	9.49	
DRO >C10-C28	<10.0	10.0	08/30/2014	ND	180	90.0	200	14.2	

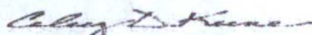
Surrogate: 1-Chlorooctane 110 % 65.2-140

Surrogate: 1-Chlorooctadecane 124 % 63.6-154

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, 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

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, Lab Director/Quality Manager



[illegible]



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

---

September 22, 2014

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 09/12/14 15:00.

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

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in dark ink, reading "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" being more prominent.

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: 09/12/2014  
Reported: 09/22/2014  
Project Name: BELCO AIA FEDERAL BATTERY  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 09/05/2014  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Jodi Henson

**Sample ID: S1 - 3' (H402857-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	15000	16.0	09/18/2014	ND	416	104	400	3.92	

**Sample ID: S1 - 4' (H402857-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16800	16.0	09/18/2014	ND	400	100	400	0.00	

**Sample ID: S1 - 5' (H402857-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	09/18/2014	ND	400	100	400	0.00	

**Sample ID: S2 - 2' (H402857-04)**

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	09/18/2014	ND	400	100	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.



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: 09/12/2014  
 Reported: 09/22/2014  
 Project Name: BELCO AIA FEDERAL BATTERY  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 09/05/2014  
 Sampling Type: Soil  
 Sampling Condition: \*\* (See Notes)  
 Sample Received By: Jodi Henson

**Sample ID: S2 - 3' (H402857-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	09/18/2014	ND	400	100	400	0.00	

**Sample ID: S2 - 4' (H402857-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1170	16.0	09/18/2014	ND	400	100	400	0.00	

**Sample ID: S2 - 5' (H402857-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	09/18/2014	ND	400	100	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.



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

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, 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

Page 5 of 5

Project Manager: Chase Settle

Project Name: Belco AIA Federal Battery

Company: (505) 393-2326 Yates Petroleum Corporation

Project #:

Company Address: 105 South 4th Street

Project Loc: Belco AIA Federal Battery

City/State/Zip: Artesia, NM 88210

PO #: 205750

Telephone No: 575-748-4171

Fax No: 575-748-4131

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: [Signature]

e-mail: csettle@yatespetroleum.com

(lab use only)

ORDER #:

H402857

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW-Drinking Water SL-Sludge	GW - Groundwater S-Soil/Solid	NP-Non-Portable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/8030 or BTEX 8260	RCI	N.O.R.M	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
1	S1-3'			9/5/2014	11:00 AM	1								X		S															X		X	
2	S1-4'			9/5/2014	11:00 AM	1								X		S															X		X	
3	S1-5'			9/5/2014	11:00 AM	1								X		S															X		X	
4	S2-2'			9/5/2014	12:00 PM	1								X		S															X		X	
5	S2-3'			9/5/2014	12:00 PM	1								X		S															X		X	
6	S2-4'			9/5/2014	12:00 PM	1								X		S															X		X	
7	S2-5'			9/5/2014	12:00 PM	1								X		S															X		X	

Special Instructions:

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time	Laboratory Comments: Sample Containers Intact? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N VOCs Free of Headspace? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Labels on container(s) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Custody seals on container(s) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Custody seals on cooler(s) <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sample Hand Delivered by Sampler/Client Rep. ? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N by Courier? <input type="checkbox"/> UPS <input type="checkbox"/> DHL <input type="checkbox"/> FedEx <input type="checkbox"/> Lone Star Temperature Upon Receipt: <u>21.4 °C</u>
Relinquished by:	Date	Time	Received by:	Date	Time	
Relinquished by:	Date	Time	Received by ELOT:	Date	Time	





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

November 03, 2014

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 10/30/14 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 [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in dark ink, reading "Coley D. Keene". The signature is fluid and cursive, with the first name "Coley" and last name "Keene" clearly distinguishable.

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:	10/30/2014	Sampling Date:	10/29/2014
Reported:	11/03/2014	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

**Sample ID: S1-6' (H403347-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1140	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S1-7' (H403347-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5120	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S1-8' (H403347-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S1-9' (H403347-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3120	16.0	10/31/2014	ND	400	100	400	3.92	

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, 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: 10/30/2014  
Reported: 11/03/2014  
Project Name: BELCO AIA FEDERAL BATTERY  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 10/29/2014  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: S2-6' (H403347-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S2-7' (H403347-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S2-8' (H403347-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	10/31/2014	ND	400	100	400	3.92	

**Sample ID: S2-9' (H403347-08)**

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	10/31/2014	ND	400	100	400	3.92	

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, 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

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, 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

Page 5 of 5

Project Manager: Chase Settle

Project Name: Belco AIA Federal Battery

Comp: (505) 393-2326 Yates Petroleum Corporation

Project #:

Company Address: 105 South 4th Street

Project Loc: Belco AIA Federal Battery

City/State/Zip: Artesia, NM 88210

PO #: 205750

Telephone No: 575-748-4171

Fax No: 575-748-4131

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Sampler Signature: [Signature] e-mail: csettle@yatespetroleum.com

(lab use only)

ORDER #: H 403347

ORDER #:		H 403397												Preservation & # of Containers		Matrix											RUSH TAT (Pre-Schedule) 24, 48, 72						
LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	GW-Drinking Water SL-Stage	GW-Drinking Water SL-Stage	NP-Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO <sub>4</sub> , Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semi-volatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.M.	Chlorides	SAR	Standard TAT	
1	S1-6'			10/29/2014	1:00 PM		1							X		S															X		
2	S1-7'			10/29/2014	1:00 PM		1							X		S															X		
3	S1-8'			10/29/2014	1:00 PM		1							X		S															X		
4	S1-9'			10/29/2014	1:00 PM		1							X		S															X		
5	S2-6'			10/29/2014	2:00 PM		1							X		S															X		
6	S2-7'			10/29/2014	2:00 PM		1							X		S															X		
7	S2-8'			10/29/2014	2:00 PM		1							X		S															X		
8	S2-9'			10/29/2014	2:00 PM		1							X		S															X		

Special Instructions:

Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>10-30-14</u>		<u>[Signature]</u>	<u>10/30/14</u>	<u>11:00</u>
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

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? Y N  
UPS DHL FedEx Lone Star  
Temperature Upon Receipt: 5-8 °C





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

---

February 19, 2015

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: BELCO AIA FEDERAL #1

Enclosed are the results of analyses for samples received by the laboratory on 02/13/15 11:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 02/13/2015  
Reported: 02/19/2015  
Project Name: BELCO AIA FEDERAL #1  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 02/09/2015  
Sampling Type: Soil  
Sampling Condition: \*\* (See Notes)  
Sample Received By: Celey D. Keene

**Sample ID: S1- 10' (H500429-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	02/17/2015	ND	416	104	400	3.92	

**Sample ID: S1- 11' (H500429-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22800	16.0	02/17/2015	ND	416	104	400	3.92	

**Sample ID: S1- 12' (H500429-03)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17400	16.0	02/17/2015	ND	416	104	400	3.92	

**Sample ID: S1- 13' (H500429-04)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17800	16.0	02/17/2015	ND	416	104	400	3.92	

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, 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:	02/13/2015	Sampling Date:	02/09/2015
Reported:	02/19/2015	Sampling Type:	Soil
Project Name:	BELCO AIA FEDERAL #1	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

**Sample ID: S1- 14' (H500429-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16600	16.0	02/17/2015	ND	416	104	400	3.92	

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, 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

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, Lab Director/Quality Manager



