

MARTIN YATES, III
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July 9, 2015

Mr. Mike Bratcher/Mrs. Heather Patterson
NMOCD District II
811 S. First St.
Artesia, NM 88210

Re: Glow Worm ALX Federal Battery
30-015-35313
Section 3, T23S-R31E
Eddy County, New Mexico
2RP-2996

Mr. Bratcher/Mrs. Patterson,

Yates Petroleum Corporation is submitting the enclosed work plan for the above captioned well. The plan is being submitted in response to the C-141 report dated May 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 August 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)

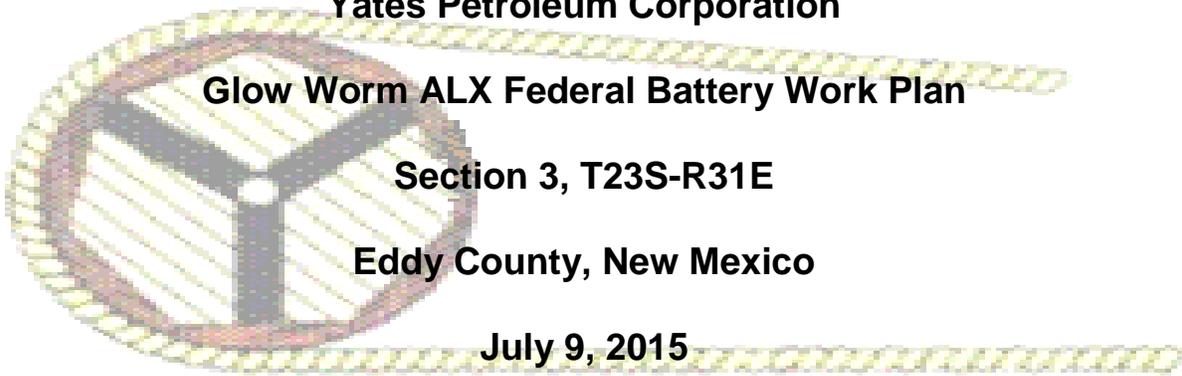
Yates Petroleum Corporation

Glow Worm ALX Federal Battery Work Plan

Section 3, T23S-R31E

Eddy County, New Mexico

July 9, 2015



I. Location

Take HWY 128 east from Carlsbad, NM, at approximately 17.8 miles turn north on Red Road and go approximately 7.4 miles then turn left on Mills Ranch Road. Take Mills Ranch Road west for approximately 2 miles then turn south on the lease road for approximately ½ a mile before turning east for a ¼ mile to arrive at the battery.

II. Background

On May 8, 2015, Yates submitted to the NMOCD District II office a Form C-141 for the release of 5 B/O and 2000 B/PW with 5 B/O and 1620 B/PW recovered. The affected area was approximately 340' X 40' within the lined, bermed battery, 750' X 40' starting at the northeast corner flowing south before turning west and running across the location and into the pasture, 104' X 80' was affected off the northeast corner of the battery by overspray, and 510' X 30' to be impacted off location flowing to the west with one pooling area that was 60' X 120'. Initial delineation samples were taken from the different sampling quadrants of the release (5/20/2015 with representatives from NMOCD onsite, and 5/21/2015) and sent to a NMOCD approved laboratory (6/1/2015 and 6/10/2015, results enclosed).

III. Surface and Ground Water

Area surface geology is Cenozoic Quaternary. The ChevronTexaco Trend Map displays at this location (Section 3, T23S-R31E) that depth to groundwater is approximately 105 feet making the site ranking for this site a zero (0). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is zero (0) based on the as following:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

IV. Soils

The area consists of soils that are sandy topsoil with a hard/solid clay layer beneath, 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 (105'), Yates Petroleum Corporation will excavate two (2) feet below soil level (BSL) in the S2 area, excavate to three (3) feet BSL in the S3 and S10 areas, and excavate to four (4) feet in the S4, S6, S7, S8, S9, and S11 areas. All excavated soils will be hauled to a NMOCD approved facility for disposal. Yates will then backfill the excavated areas with caliche to the two (2) foot BSL mark, where the remaining two (2) feet will be backfilled with a topsoil similar to what is already present at the location. Yates will reseed the S2, S4, S6, S7, S8, S9, S10, and S11 areas with BLM LPC Seed Mixture, if remediation finishes after August 15, 2015, then seeding will occur in the 2016 planting season. When remediation work is completed a C-141, Final Report will be submitted to the NMOCD requesting closure of the site.

Glow Worm ALX Federal Battery

Area	Analysis #	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	H501302	Release Area	5/20/2015	Backhoe	1'	<0.3	<10.0	<10.0	<16.0
S1-3'	H501302	Release Area	5/20/2015	Backhoe	3'	<0.3	<10.0	<10.0	48
S2-1'	H501302	Release Area	5/20/2015	Backhoe	1'	<0.3	<10.0	34.8	5600
S2-2'	H501302	Release Area	5/20/2015	Backhoe	2'	<0.3	<10.0	<10.0	1760
S2-3'	H501429	Release Area	5/20/2015	Backhoe	3'	N/A	N/A	N/A	112
S3-1'	H501302	Release Area	5/20/2015	Backhoe	1'	<0.3	<10.0	<10.0	2600
S3-2'	H501302	Release Area	5/20/2015	Backhoe	2'	<0.3	<10.0	<10.0	2160
S3-3'	H501429	Release Area	5/20/2015	Backhoe	3'	N/A	N/A	N/A	1340
S3-4'	H501429	Release Area	5/20/2015	Backhoe	4'	N/A	N/A	N/A	960
S4-1'	H501302	Release Area	5/20/2015	Backhoe	1'	33.2	633	3160	3880
S4-3'	H501302	Release Area	5/20/2015	Backhoe	3'	54.9	996	3910	3400
S4-5'	H501302	Release Area	5/20/2015	Backhoe	5'	1.86	85.6	807	784
S4-7'	H501429	Release Area	5/20/2015	Backhoe	7'	N/A	N/A	N/A	96
S4-9'	H501429	Release Area	5/20/2015	Backhoe	9'	N/A	N/A	N/A	48
S5-1'	H501302	Release Area	5/20/2015	Backhoe	1'	<0.3	<10.0	<10.0	64
S5-3'	H501302	Release Area	5/20/2015	Backhoe	3'	<0.3	<10.0	<10.0	3440
S5-5'	H501429	Release Area	5/20/2015	Backhoe	5'	N/A	N/A	N/A	<16.0
S5-7'	H501429	Release Area	5/20/2015	Backhoe	7'	N/A	N/A	N/A	<16.0
S5-9'	H501429	Release Area	5/20/2015	Backhoe	9'	N/A	N/A	N/A	256
S6-1'	H501302	Release Area	5/20/2015	Backhoe	1'	<0.3	<10.0	<10.0	4720
S6-3'	H501302	Release Area	5/20/2015	Backhoe	3'	<0.3	<10.0	<10.0	4400
S6-5'	H501429	Release Area	5/20/2015	Backhoe	5'	N/A	N/A	N/A	400
S6-7'	H501429	Release Area	5/20/2015	Backhoe	7'	N/A	N/A	N/A	32
S6-9'	H501429	Release Area	5/20/2015	Backhoe	9'	N/A	N/A	N/A	96
S7-1'	H501302	Release Area	5/21/2015	Backhoe	1'	<0.3	<10.0	<10.0	16400
S7-3'	H501302	Release Area	5/21/2015	Backhoe	3'	<0.3	<10.0	<10.0	4560
S7-5'	H501429	Release Area	5/21/2015	Backhoe	5'	N/A	N/A	N/A	96
S7-7'	H501429	Release Area	5/21/2015	Backhoe	7'	N/A	N/A	N/A	<16.0
S7-9'	H501429	Release Area	5/21/2015	Backhoe	9'	N/A	N/A	N/A	80
S8-1'	H501302	Release Area	5/21/2015	Backhoe	1'	31.4	1440	11900	3840
S8-3'	H501302	Release Area	5/21/2015	Backhoe	3'	<0.3	<10.0	<10.0	21200
S8-5'	H501429	Release Area	5/21/2015	Backhoe	5'	N/A	N/A	N/A	<16.0
S8-7'	H501429	Release Area	5/21/2015	Backhoe	7'	N/A	N/A	N/A	64
S8-9'	H501429	Release Area	5/21/2015	Backhoe	9'	N/A	N/A	N/A	48
S9-1'	H501302	Release Area	5/21/2015	Backhoe	1'	<0.3	<10.0	<10.0	4320
S9-3'	H501302	Release Area	5/21/2015	Backhoe	3'	<0.3	<10.0	<10.0	2000
S9-5'	H501429	Release Area	5/21/2015	Backhoe	5'	N/A	N/A	N/A	112
S9-7'	H501429	Release Area	5/21/2015	Backhoe	7'	N/A	N/A	N/A	<16.0
S9-9'	H501429	Release Area	5/21/2015	Backhoe	9'	N/A	N/A	N/A	96
S10-1'	H501302	Release Area	5/21/2015	Backhoe	1'	<0.3	<10.0	<10.0	8400
S10-3'	H501302	Release Area	5/21/2015	Backhoe	3'	<0.3	<10.0	<10.0	1360
S10-5'	H501429	Release Area	5/21/2015	Backhoe	5'	N/A	N/A	N/A	112
S10-7'	H501429	Release Area	5/21/2015	Backhoe	7'	N/A	N/A	N/A	224
S11-1'	H501302	Release Area	5/21/2015	Backhoe	1'	<0.3	<10.0	<10.0	12200
S11-3'	H501302	Release Area	5/21/2015	Backhoe	3'	<0.3	<10.0	<10.0	3440
S11-5'	H501429	Release Area	5/21/2015	Backhoe	5'	N/A	N/A	N/A	<16.0
S11-7'	H501429	Release Area	5/21/2015	Backhoe	7'	N/A	N/A	N/A	<16.0

Site Ranking is Zero (0). >100' (105', Section 3, T23S-R31E, Trend Map

All results are ppm. Chlorides for documentation

Released: 5 B/O & 2000 B/PW; Recovered: 5 B/O & 1620 B/PW Release Date: 04/27/2015



June 01, 2015

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: GLOW WORM ALX FEDERAL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 05/22/15 15:20.

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.

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 black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, flowing "C" and "K".

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:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 1 - 1' (H501302-01)

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	05/27/2015	ND	1.80	89.9	2.00	2.19	
Toluene*	<0.050	0.050	05/27/2015	ND	1.93	96.4	2.00	1.99	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.91	95.5	2.00	2.78	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.63	93.9	6.00	2.19	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	05/28/2015	ND	416	104	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	05/26/2015	ND	177	88.3	200	4.29	
DRO >C10-C28	<10.0	10.0	05/26/2015	ND	188	94.0	200	6.98	

Surrogate: 1-Chlorooctane 102 % 47.2-157
Surrogate: 1-Chlorooctadecane 116 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 1 - 3' (H501302-02)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	05/28/2015	ND	416	104	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	05/26/2015	ND	177	88.3	200	4.29	
DRO >C10-C28	<10.0	10.0	05/26/2015	ND	188	94.0	200	6.98	

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 113 % 52.1-176

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 2 - 1' (H501302-03)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5600	16.0	05/28/2015	ND	416	104	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	05/26/2015	ND	177	88.3	200	4.29		
DRO >C10-C28	34.8	10.0	05/26/2015	ND	188	94.0	200	6.98		

Surrogate: 1-Chlorooctane 103 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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* = Accredited Analyte

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Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 2 - 2' (H501302-04)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1760	16.0	05/28/2015	ND	416	104	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	05/26/2015	ND	177	88.3	200	4.29		
DRO >C10-C28	<10.0	10.0	05/26/2015	ND	188	94.0	200	6.98		

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 114 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 3 - 1' (H501302-05)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2600	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 101 % 47.2-157
Surrogate: 1-Chlorooctadecane 116 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 3 - 2' (H501302-06)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2160	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 97.7 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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 Artesia NM, 88210
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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 4 - 1' (H501302-07)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	7.54	0.200	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	6.22	0.200	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	19.5	0.600	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	33.2	1.20	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 128 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3880	16.0	05/28/2015	ND	416	104	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	633	50.0	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	3160	50.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 151 % 47.2-157

Surrogate: 1-Chlorooctadecane 159 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 4 - 3' (H501302-08)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	9.50	0.500	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	8.40	0.500	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	37.0	1.50	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	54.9	3.00	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 147 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3400	16.0	05/28/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	996	50.0	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	3910	50.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 160 % 47.2-157

Surrogate: 1-Chlorooctadecane 153 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 4 - 5' (H501302-09)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	0.077	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	0.288	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	1.49	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	1.86	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 149 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	784	16.0	05/28/2015	ND	416	104	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	85.6	10.0	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	807	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 113 % 47.2-157

Surrogate: 1-Chlorooctadecane 124 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 5 - 1' (H501302-10)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 95.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 5 - 3' (H501302-11)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3440	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 6 - 1' (H501302-12)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 115 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/20/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 6 - 3' (H501302-13)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

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	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 92.0 % 47.2-157
Surrogate: 1-Chlorooctadecane 107 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 7 - 1' (H501302-14)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16400	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 7 - 3' (H501302-15)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Analytical Results For:

YATES PETROLEUM CORPORATION
 CHASE SETTLE
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 Artesia NM, 88210
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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 8 - 1' (H501302-16)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	1.64	1.00	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	4.58	1.00	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	25.2	3.00	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	31.4	6.00	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3840	16.0	05/28/2015	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1440	50.0	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	11900	50.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 192 % 47.2-157

Surrogate: 1-Chlorooctadecane 272 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 8 - 3' (H501302-17)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	21200	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 101 % 47.2-157

Surrogate: 1-Chlorooctadecane 116 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 9 - 1' (H501302-18)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4320	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 105 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 9 - 3' (H501302-19)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2000	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

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

Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 10 - 1' (H501302-20)

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	05/27/2015	ND	1.69	84.3	2.00	1.06	
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65	
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20	
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41	
Total BTEX	<0.300	0.300	05/27/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8400	16.0	05/28/2015	ND	416	104	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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 104 % 47.2-157

Surrogate: 1-Chlorooctadecane 119 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 10 - 3' (H501302-21)

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	05/27/2015	ND	1.69	84.3	2.00	1.06		
Toluene*	<0.050	0.050	05/27/2015	ND	1.79	89.7	2.00	1.65		
Ethylbenzene*	<0.050	0.050	05/27/2015	ND	1.78	88.9	2.00	3.20		
Total Xylenes*	<0.150	0.150	05/27/2015	ND	5.20	86.7	6.00	3.41		
Total BTEX	<0.300	0.300	05/27/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1360	16.0	05/27/2015	ND	416	104	400	3.92		

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	05/27/2015	ND	178	88.8	200	1.59		
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68		

Surrogate: 1-Chlorooctane 96.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 117 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 11 - 1' (H501302-22)

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	05/28/2015	ND	1.83	91.4	2.00	0.634	
Toluene*	<0.050	0.050	05/28/2015	ND	1.87	93.3	2.00	1.71	
Ethylbenzene*	<0.050	0.050	05/28/2015	ND	1.75	87.5	2.00	3.91	
Total Xylenes*	<0.150	0.150	05/28/2015	ND	5.04	84.0	6.00	3.69	
Total BTEX	<0.300	0.300	05/28/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 61-154

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12200	16.0	05/27/2015	ND	416	104	400	3.92	

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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 107 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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Received:	05/22/2015	Sampling Date:	05/21/2015
Reported:	06/01/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S 11 - 3' (H501302-23)

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	05/28/2015	ND	1.83	91.4	2.00	0.634	
Toluene*	<0.050	0.050	05/28/2015	ND	1.87	93.3	2.00	1.71	
Ethylbenzene*	<0.050	0.050	05/28/2015	ND	1.75	87.5	2.00	3.91	
Total Xylenes*	<0.150	0.150	05/28/2015	ND	5.04	84.0	6.00	3.69	
Total BTEX	<0.300	0.300	05/28/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 61-154

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3440	16.0	05/27/2015	ND	416	104	400	3.92	

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	05/27/2015	ND	178	88.8	200	1.59	
DRO >C10-C28	<10.0	10.0	05/27/2015	ND	190	94.8	200	1.68	

Surrogate: 1-Chlorooctane 109 % 47.2-157

Surrogate: 1-Chlorooctadecane 126 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
- 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



Celey D. Keene, Lab Director/Quality Manager



June 10, 2015

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: GLOW WORM ALX FEDERAL BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 06/03/15 14:15.

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.

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 black ink that reads "Celey D. 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:	06/03/2015	Sampling Date:	05/20/2015
Reported:	06/10/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S2 - 3' (H501429-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S3 - 3' (H501429-02)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1340	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S3 - 4' (H501429-03)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S4 - 7' (H501429-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/09/2015	ND	416	104	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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

Received:	06/03/2015	Sampling Date:	05/20/2015
Reported:	06/10/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S4 - 9' (H501429-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S5 - 5' (H501429-06)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S5 - 7' (H501429-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S5 - 9' (H501429-08)

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	06/09/2015	ND	416	104	400	3.77	

Sample ID: S6 - 5' (H501429-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	06/09/2015	ND	416	104	400	3.77	

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

Received:	06/03/2015	Sampling Date:	05/20/2015
Reported:	06/10/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S6 - 7' (H501429-10)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S6 - 9' (H501429-11)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S7 - 5' (H501429-12)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S7 - 7' (H501429-13)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S7 - 9' (H501429-14)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/09/2015	ND	416	104	400	3.77	

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 105 S 4th Street
 Artesia NM, 88210
 Fax To: (505) 748-4635

Received:	06/03/2015	Sampling Date:	05/21/2015
Reported:	06/10/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S8 - 5' (H501429-15)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S8 - 7' (H501429-16)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S8 - 9' (H501429-17)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S9 - 5' (H501429-18)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S9 - 7' (H501429-19)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

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 CHASE SETTLE
 105 S 4th Street
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 Fax To: (505) 748-4635

Received:	06/03/2015	Sampling Date:	05/21/2015
Reported:	06/10/2015	Sampling Type:	Soil
Project Name:	GLOW WORM ALX FEDERAL BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: S9 - 9' (H501429-20)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S10 - 5' (H501429-21)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S10 - 7' (H501429-22)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S11 - 5' (H501429-23)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

Sample ID: S11 - 7' (H501429-24)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/09/2015	ND	416	104	400	3.77	

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

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

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