MARTIN YATES, III

FRANK W. YATES 1936-1986

> S.P. YATES 1914-2008



JOHN A. YATES

CHAIRMAN EMERITUS

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105 SOUTH FOURTH STREET ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

www.yatespetroleum.com

TELEPHONE (575) 748-1

October 13, 2014

Mr. Mike Bratcher NMOCD District II 811 South First Street Artesia, NM 88210

RE:

Mimosa Federal SWD #3Y

30-015-29123

Section 4, T20S-R24E

Eddy County, New Mexico

Mr. Bratcher,

Yates Petroleum Corporation would like to submit the following plan of work to you regarding the release that occurred at the above mentioned facility on July 30, 2014 (2RP-2435).

Initial TPH/BTEX and Chloride delineation samples were taken on 9/3/2014 for the release area. They were sent to a NMOCD approved facility and are attached for your review. Analytical reports showed that TPH in Section 2 were above NMOC Recommended Remediation Action Levels. Initial results also showed elevated chloride levels in Sections 1, 2, and 3. Further vertical delineation for TPH in Section 2 and chlorides in Sections 1, 2, and 3 was conducted on 10/2/2014 and results are attached for your review.

Based off of vertical delineation, Yates proposes to do the following remaining work.

- 1. Excavate the entire release area to a depth of 2'.
- 2. Backfill the release are with packed caliche.

Yates would like to start this work as soon as possible. Yates will submit a Final C-141 to your office once the excavation and backfill work has been completed. The site will then be turned back over to production so they can re-build their battery (lined and bermed) and get it back into service.

If you have any questions or concerns, I can be reached at (575) 748-4111 or by email at acannon@yatespetroleum.com.

Thank You.

Amber Cannon

Environmental Regulatory Agent

Yates Petroleum Corporation



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С

E S

S

X-Sample Point 1

TANK BATTERY AREA

RELEASE AREA

X-Sample Point 2

X-Sample Point 3

WATER PUMP SHED





Mimosa Federal SWD #3Y

30-015-29123

Section 4, T20S-R24E

Eddy County, NM

Prepared by Amber Cannon Environmental Regulatory Agent

Drawing not to Scale

Mimosa Federal SWD #3Y

Cardinal Laboratories

	Analytical Report Sample	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO DRO	RO TOTAL	Chlorides
1-Surface	H402749	Release Area	9/3/2014	Grab/Backhoe	Surface	4.94	38.7	336 374.7	13,200
1-1	H402749	Release Area	9/3/2014	Grab/Backhoe	1.	QN	ND 4	42.7 42.7	3,040
1-2'	H402749	Release Area	9/3/2014	Grab/Backhoe	2'	0.546	17.1	116 133.1	6,560
1-5'	H403042	Release Area	10/2/2014	Grab/Trackhoe	2,				192
1-6	H403042	Release Area	10/2/2014	Grab/Trackhoe	.9				176
2-Surface	H402749	Release Area	9/3/2014	Grab/Backhoe	Surface	26.4	248 3	3030 3278	4,960
2-1'	H402749	Release Area	9/3/2014	Grab/Backhoe	1.	28.1	253	988 1241	2,320
2-2'	H402749	Release Area	9/3/2014	Grab/Backhoe	2'	2.94	184 1	1070 1254	3,040
2-4'	H403042	Release Area	10/2/2014	Grab/Trackhoe	4,		19	242 261	80
2-6'	H403042	Release Area	10/2/2014	Grab/Trackhoe	,9		QN	QN QN	80
2-8'	H403042	Release Area	10/2/2014	Grab/Trackhoe	.8		I QN	17.6	96
3-Surface	H402749	Release Area	9/3/2014	Grab/Backhoe	Surface	1.46	85.1 2	2930 3015.1	6,800
3-1-	H402749	Release Area	9/3/2014	Grab/Backhoe	1.	0.584	GN	266 566	4,360
3-2'	H403042	Release Area	10/2/2014	Grab/Trackhoe	2'				2,120
3-4'	H403042	Release Area	10/2/2014	Grab/Trackhoe	4'				1,070
3-6'	H403042	Release Area	10/2/2014	Grab/Trackhoe	.9				160
3-8,	H403042	Release Area	10/2/2014	Grab/Trackhoe	8,				336

Site Ranking is TEN (10). Depth to Ground Water 310' per ChevronTexaco Trend Map; 200'-1,000' to Surface Water Body All results are ppm.Chlorides for documentation.
Released: 8 B/PW; Recovered: 5 B/PW. Release Date: 7/30/2014. 2RP-2435



September 11, 2014

AMBER CANNON

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: MIMOSA FEDERAL SWD #3Y

Enclosed are the results of analyses for samples received by the laboratory on 09/04/14 10:15.

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.qov/field/qa/lab accred certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keene

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



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

Sampling Type:

Soil

09/11/2014

RS

400

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

Analyte

EDDY COUNTY, NM

Result

13200

Sample ID: 1-SURFACE (H402749-01) Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Reporting Limit

16.0

Reporting Limit

Analyzed 09/10/2014

ND

% Recovery 100

True Value QC

RPD

Oualifier

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

% Recovery

100

400

7.69

Sample ID: 1-1' (H402749-02)

Analyte

Analyte

Analyte

Analyzed

Method Blank

Method Blank

True Value QC

Chloride

Chloride

Result 3040

16.0

09/10/2014

ND

BS 400

400

Qualifier

Sample ID: 1-2' (H402749-03)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Chloride

Result 6560 Reporting Limit 16.0

Analyzed 09/10/2014 Method Blank ND

BS 400 % Recovery 100

True Value QC

RPD

Qualifier

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

400

7.69

RPD

7.69

Sample ID: 2-SURFACE (H402749-04)

Chloride

Result

4960

Reporting Limit

16.0

Analyzed

09/10/2014

Method Blank ND

BS 400

% Recovery 100

True Value QC 400

RPD 7.69 Oualifier

Cardinal Laboratories

*=Accredited Analyte

All claims, including those for negligence and 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. 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. 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.

Con theme

Celey D. Keene, Lab Director/Quality Manager



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 2-1' (H402749-05)

M4500CI-B

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	09/10/2014	ND	400	100	400	7.69	
Sample ID: 2-2' (H402749-0	6)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	09/10/2014	ND	400	100	400	7.69	
Sample ID: 3-SURFACE (H40	2749-07)								
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	09/10/2014	ND	416	104	400	0.00	
Sample ID: 3-1' (H402749-0	8)								
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

Cardinal Laboratories

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Comment of the same



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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*=Accredited Analyte

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ely 2 time-

ORDER# H402 (lab use only) Special Instructions: Relinquished by: Relinquished by λεμοσυίστεο by: _AB # (lab use only) とうとうと Sampler Signature: Telephone No: City/State/Zip: 3-1 3 - Surface 1-2 - Surface Surface うろろう FIELD CODE Artesia, NM 88210 575-748-4111 or 575-513-8799 CMODEL separate report. TPH: 8015B, BTEX: 8021B. Date なられるう Beginning Depth Ŋ * N ... Thank you inne 100 <u>_</u> **Ending Depth** Nkk -N Received by ELOT: 9/3/2014 9/3/2014 9/3/2014 9/3/2014 9/3/2014 9/3/2014 9/3/2014 Please show BTEX results as mg/kg. Date Sampled 11:27 AM 10:55 AM 11:07 AM 10:48 AM 11:05 AM 11:19 AM 11:15 AM 10.45 Fax No: Time Sampled email Field Filtered 575-748-4131 acannon@yatespetroleum.com Total #. of Containers __ × lce × × × × × × HNO HCI Please put chlorides on a H,SO. NaOH Na₂S₂O₂ None Q Other (Specify) T Date DW=Drinking Water SL=Sludge Ē Report Format: (1) S S S S (1) 100 S う で が 8015M 8015 418.1 × × × TPH: × \times \times Time me TPH. TX 1005 7X 1006 Cations (Ca, Mg, Na, K) Sample Hand Delivered by Sampler Chent Rop. 7
by Courier? UPS Custody seals on container(s)
Custody seals on cooler(s) Sample Containers Intact? Temperature Upon Receipt: Laboratory Comments: Labels on container(s). VOCs Free of Headspace? | X | Standard Anions (Cl. SO4, Alkalinity) TCLP SAR / ESP / CEC Metale: As Ag Ba Cd Cr Pb Hg S Volatiles Semivolatiles 505 TRRP STEX 8021B/5030 or BTEX 8280 × × × × × × $\times \times$ RCI N.O.R.M. Chlorides × × × × × NPDES SAR RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

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101 East Marland, Hobbs, NM 88240 ARDINAL LABORATORIES

Project Manager:

Amber Cannon

Company Address:

105 South 4th Street

Company Name

Yates Petroleum Corporation

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name:

Mimosa Federal SWD #3Y

30-015-29123 Eddy County

AWLES BELEO ENCYMKI

Standard TAT

XX

18148429291

Hi 35:5

Project Loca

PO #:

205-2020

Project #:

Page 5 of 5



September 11, 2014

AMBER CANNON

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: MIMOSA FEDERAL SWD #3Y

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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.

Celes & Keene

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



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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition: Sample Received By: Cool & Intact Kathy Perez

Project Number:

30-015-29123

Project Location: EDDY COUNTY, NM

Sample ID: 1-SURFACE (H402749-01)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	0.383	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	1.08	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	3.48	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	4.94	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	166	% 89.4-12	6						
TPH 8015M	mg,	'kg	Analyze	d By: ms	tanan marana di Alian Marana				notational and management and an arrangement and a second
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	38.7	10.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	336	10.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	93.5	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	109	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Ulability and Damages. Cardinal's liability and dient's exclusive remety 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.

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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 1-1' (H402749-02)

BTEX 8021B	mg/	kg	Analyze	d By: MS					##-##V-10100-2-0000-000
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	<0.050	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	<0.150	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	<0.300	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIC	107 9	% 89.4-12	6						
TPH 8015M	mg/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	42.7	10.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	82.5	% 65.2-14	0	MANUFACTURE OF THE PARTY OF THE					
Surrogate: 1-Chlorooctadecane	97.1	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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ally & steme



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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 1-2' (H402749-03)

Sumple 15: 1 2 (11402745 05)		4							
BTEX 8021B	rng	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	0.116	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	0.429	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	0.546	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	120	% 89.4-12	6						
TPH 8015M	rng,	'kg	Analyze	d By: ms		,			·
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	17.1	10.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	116	10.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	96.0	% 65.2-14	0					No.	
Surrogate: 1-Chlorooctadecane	108	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 2-SURFACE (H402749-04)

BTEX 8021B	rng	kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	1.42	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	2.61	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	22.4	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	26.4	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	261	% 89.4-12	6						
TPH 8015M	mg	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	248	10.0	09/08/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	3030	10.0	09/08/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	115	65.2-14	0					A CONTRACTOR OF THE CONTRACTOR	
Surrogate: 1-Chlorooctadecane	145	% 63.6-15	4						

Cardinal Laboratories

*=Accredited Analyte

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Cly 2 tere-



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 2-1' (H402749-05)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	2.61	0.200	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	5.49	0.200	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	20.0	0.600	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	28.1	1.20	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	155	% 89.4-12	6						
TPH 8015M	mg/	'kg	Analyze	ed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	253	50.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	988	50.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	117 9	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	124	% 63.6-15	4						

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*=Accredited Analyte

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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

50

Project Number:

30-015-29123

Sampling Condition: Sample Received By: Cool & Intact Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 2-2' (H402749-06)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.200	0.200	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	0.544	0.200	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	2.39	0.600	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	2.94	1.20	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	120 9	% 89.4-12	6						
TPH 8015M	rng/	kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	184	50.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	1070	50.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	113 %	65.2-14	10						
Surrogate: 1-Chlorooctadecane	117 9	63.6-15	4						

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

Received:

09/04/2014

Sampling Date:

09/03/2014

Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

MIMOSA FEDERAL SWD #3Y

Sample ID: 3-SURFACE (H402749-07)

BTEX 8021B	rng	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	0.132	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	1.33	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	1.46	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIL	144	% 89.4-12	6						
TPH 8015M	mg	'kg	Analyze	d By: ms					S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifie
GRO C6-C10	85.1	50.0	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	2930	50.0	09/06/2014	ND	213	107	200	0.664	
Surrogate: 1-Chlorooctane	105	% 65.2-14	0		***************************************				
Surrogate: 1-Chlorooctadecane	156	% 63.6-15	4						

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alex trens-



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

09/04/2014

Sampling Date:

09/03/2014

Received: Reported:

09/11/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Type.
Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Kathy Perez

Project Location:

EDDY COUNTY, NM

Sample ID: 3-1' (H402749-08)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	0.050	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	0.535	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	0.584	0.300	09/10/2014	ND					
Surrogate: 4-Bromofluorobenzene (PIE	127 9	% 89.4-12	6						
TPH 8015M	mg/	'kg	Analyze	d By: MS	in the second				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	09/05/2014	ND	190	94.9	200	2.39	
DRO >C10-C28	566	50.0	09/05/2014	ND	192	95.9	200	5.98	
Surrogate: 1-Chlorooctane	102 5	% 65.2-14	0					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Surrogate: 1-Chlorooctadecane	114 9	% 63.6-15	4						

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*=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 dient 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.

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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.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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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PLEASE NOTE: Uability 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 incured 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.

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ORDER#: H402 (lab use only) Special Instructions: Relinquished by: Relinquished by: Religiquished by: LAB # (lab use only) SON SON Company Address: Company Name Sampler Signature: Telephone No: City/State/Zip: Project Manager: 1 - 2: 12 ---<u>ب</u> ص 2.2 2 - Surface 3 - Surface 1 - Surface ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 FIELD CODE 105 South 4th Street Amber Cannon Yates Petroleum Corporation 575-748-4111 or 575-513-8799 Artesia, NM 88210 である。 separate report. TPH: 8015B, BTEX: 8021B. Q Date ときざらず Beginning Depth Ŋ -<u>Ļ</u>y -N Thank you. atun! ime me **Ending Depth** N <u>...</u> Ņ ----(505) 393-2326 FAX (505) 393-2476 Received by ELOT telived by 9/3/2014 9/3/2014 9/3/2014 9/3/2014 9/3/2014 Please show BTEX results as mg/kg. 9/3/2014 9/3/2014 9/3/2014 Date Sampled 11:19 AM 10:48 AM 11:27 AM 11:15 AM 11:07 AM 11:05 AM 10:55 AM 10*45 Fax No: email Time Sampled Fleld Filtered acannon@yatespetroleum.com 575-748-4131 Total #, of Containers ٠.. __} × × Ice × × HNO engtion & # of Containers HCI Please put chlorides on a H,50. NaOH Na₂S₂O₂ Nore Q Other (Specify) T Date Dyv=Drinking Water SL=Studge Report Format: GW = Groundwater S=Sc#Sc#e (1) (1) (/) S S S S S Project Name: Project Loca Project #: Q 8015M 413. × × × × × × Time TX 1006 PO#: TX 1005 TPH: Cations (Ca. Mg. Na. K) Custody seals on container(s)
Custody seals on cooler(s) Sample Hand Delivered by Sampler Chent Rop. by Counter? UPS VOCs Free of Headspace? Sample Containers, Intact? Laboratory Comments: Temperature Upon Receipt: labels on containers. | X | Standard Anions (Cl. SO4, Alkalinity) TOTAL TCLP: SAR / ESP / CEC Metals: As Ag Ba Cd Cr Pb Hg Se Mimosa Federal SWD #3Y analyze For Semivolatiles 30-015-29123 Eddy County ☐ TRRP BTEX 80216/5030 or BTEX 8260 205-2020 × × × × × × × RCI N O.R.M. Chlorides × × × NPDES SAR RUSH TAT (Pre-Schedule) 24, 43, 72 hrs Standard TAT ×

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

 $\times \times$ 19148449491

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AWLES BELKO ENCYMKL

Page 11 of 11 - "



October 09, 2014

AMBER CANNON
YATES PETROLEUM CORPORATION
105 S 4th Street
Artesia, NM 88210

RE: MIMOSA FEDERAL SWD #3Y

Enclosed are the results of analyses for samples received by the laboratory on 10/03/14 14:30.

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 accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celes & Keene

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



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

10/03/2014

Sampling Date:

10/02/2014

Reported:

10/09/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Jodi Henson

Project Location:

Analyte

EDDY COUNTY, NM

Sample ID: 1-5' (H403042-01)

mg/kg

Result

192

Analyzed By: AP

BS

% Recovery True Value QC RPD

0.00

Qualifier

Chloride

16.0 10/08/2014

Reporting Limit

Method Blank ND

416

104

400

True Value QC

400

Sample ID: 1-6' (H403042-02)

Analyte

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

% Recovery

Qualifier

Chloride

Result

176

16.0

Reporting Limit

Analyzed 10/08/2014

Analyzed

Method Blank ND

BS 416

104

RPD

0.00

Sample ID: 2-4' (H403042-03)

Analyte

Analyte

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Result Reporting Limit

Analyzed

Method Blank

BS

% Recovery

RPD True Value QC

Qualifier

Chloride

80.0

16.0

10/08/2014

ND

416

104

400

0.00

Sample ID: 2-6' (H403042-04)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Method Blank

BS

% Recovery

True Value QC

RPD

Chloride

Result 0.08

16.0

Reporting Limit

Analyzed 10/08/2014

ND

416

104

400

Qualifier 0.00

Cardinal Laboratories

*=Accredited Analyte

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Clay trens

Celey D. Keene, Lab Director/Quality Manager



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

10/03/2014

Sampling Date:

10/02/2014

Reported:

10/09/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Sample Received By:

Jodi Henson

Project Location:

EDDY COUNTY, NM

Sample ID: 2-8' (H403042-05)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/08/2014	ND	400	100	400	0.00	
Sample ID: 3-2' (H403042-06)									
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	10/08/2014	ND	400	100	400	0.00	
Sample ID: 3-4' (H403042-07) Chloride, SM4500CI-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1070	16.0	10/08/2014	ND	400	100	400	0.00	
Sample ID: 3-6' (H403042-08)									
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/08/2014	ND	400	100	400	0.00	
Sample ID: 3-8' (H403042-09)									
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP		Port of the second			
Analyte		Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	10/08/2014	ND	400	100	400	0.00	

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Clay I trend



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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ally & Kens-

RUSH TAT (Pre-Schedule) 24, 48, 72 hrs

Standard TAT

Page 5 of 5



October 09, 2014

AMBER CANNON
YATES PETROLEUM CORPORATION
105 S 4th Street
Artesia, NM 88210

RE: MIMOSA FEDERAL SWD #3Y

Enclosed are the results of analyses for samples received by the laboratory on 10/03/14 14:30.

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 accredited certif.html.

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

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Kene

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



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

10/03/2014

Sampling Date:

10/02/2014

Reported:

10/09/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Reporting Limit

Sampling Condition:

Cool & Intact

30-015-29123

Project Number:

Sample Received By:

Jodi Henson

Project Location:

Analyte

EDDY COUNTY, NM

Sample ID: 2-4' (H403042-03)

TPH 8015M

mg/kg

Analyzed By: ms

True Value QC RPD Method Blank BS % Recovery

88.2

90.2

GRO C6-C10 DRO >C10-C28

10.0 10.0 242

Result

19.0

10/07/2014 10/07/2014

Analyzed

ND ND

176 180 200 200 4.12

3.18

Qualifier

105 %

47.2-157

Surrogate: I-Chlorooctadecane

Surrogate: 1-Chlorooctane

105 %

52.1-176

Sample ID: 2-6' (H403042-04)

TPH 8015M	mg,	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD 4.12	Qualifier
GRO C6-C10	<10.0	10.0	10/07/2014	ND	176	88.2	200		
DRO >C10-C28	<10.0	10.0	10/07/2014	ND	180	90.2	200	3.18	
Surrogate: 1-Chlorooctane	98.6	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	99.3	% 52.1-17	6						

Cardinal Laboratories

*=Accredited Analyte

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all there

Celey D. Keene, Lab Director/Quality Manager



YATES PETROLEUM CORPORATION AMBER CANNON 105 S 4th Street Artesia NM, 88210

Fax To:

(505) 748-4635

Received:

10/03/2014

Sampling Date:

10/02/2014

Reported:

10/09/2014

Sampling Type:

Soil

Project Name:

MIMOSA FEDERAL SWD #3Y

Sampling Condition:

Cool & Intact

Project Number:

30-015-29123

Project Location:

EDDY COUNTY, NM

Sample Received By:

Jodi Henson

Sample ID: 2-8' (H403042-05)

TPH 8015M	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD 4.12 3.18	Qualifier
GRO C6-C10	<10.0	10.0	10/07/2014	ND	176	88.2	200		
DRO >C10-C28	17.6	10.0	10/07/2014	ND	180	90.2	200		
Surrogate: 1-Chlorooctane	103	% 47.2-15	7					MARKANIA MINISTRALIA MARKANIA	
Surrogate: 1-Chlorooctadecane	98.4	% 52.1-17	6						

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Notes and Definitions

Analyte NOT DETECTED at or above the reporting limit Relative Percent Difference RPD 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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ARDINAL LABORATORIES

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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			Cannon	and the same of th	IPH: 8015B										FIELD CODE	さららりたも	2	Signature: (LIMBEL	e No: 575-748-4111 or 575-513-8799	/Zip: Artesia, NM 88210	Address: 105 South 4th Street	Name Yates Petroleum Corporation	anager: Amber Cannon	ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240	
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