

MARTIN YATES, III

1912-1985

FRANK W. YATES

1936-1986

S.P. YATES

1914-2008



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

[www.yatespetroleum.com](http://www.yatespetroleum.com)

JOHN A. YATES  
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July 29, 2015

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

Re: State CO SWD System (West of Saguaro #4 Battery)  
30-015-26420  
Section 14, T20S-R24E  
Eddy County, New Mexico

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 February 10, 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 14, 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

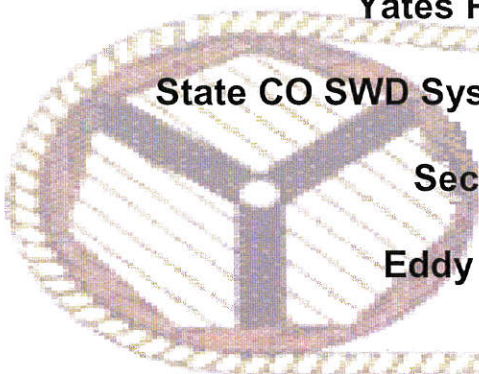
**Yates Petroleum Corporation**

**State CO SWD System (West of Saguaro #4 Battery)**

**Section 14, T20S-R24E**

**Eddy County, New Mexico**

**July 29, 2015**



**I. Location**

Go south from Artesia on HWY 285 for approximately 15 miles to Rock Daisy Road (CR-23) then turn west for approximately 8.4 miles to Sawbuck Road (CR-26), turn south for approximately 2.3 miles, then turn east on lease road for 0.25 mile before turning south for approximately 0.8 mile to arrive at release site.

**II. Background**

On February 10, 2015, Yates Petroleum Corporation submitted to the NMOCD District II office a Form C-141 for the release of an unknown amount with none recovered. The total affected area was approximately 60 feet by 60 feet around the 12 inch poly produced water transfer line. Initial delineation samples were taken in the release area (3/19/2015) and sent to a NMOCD approved laboratory (3/24/2015, results enclosed).

**III. Surface and Ground Water**

Area surface geology is Mesozoic Permian. The ChevronTexaco Trend Map displays at this location (Section 14, T20S-R24E) that depth to groundwater is approximately 230 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:

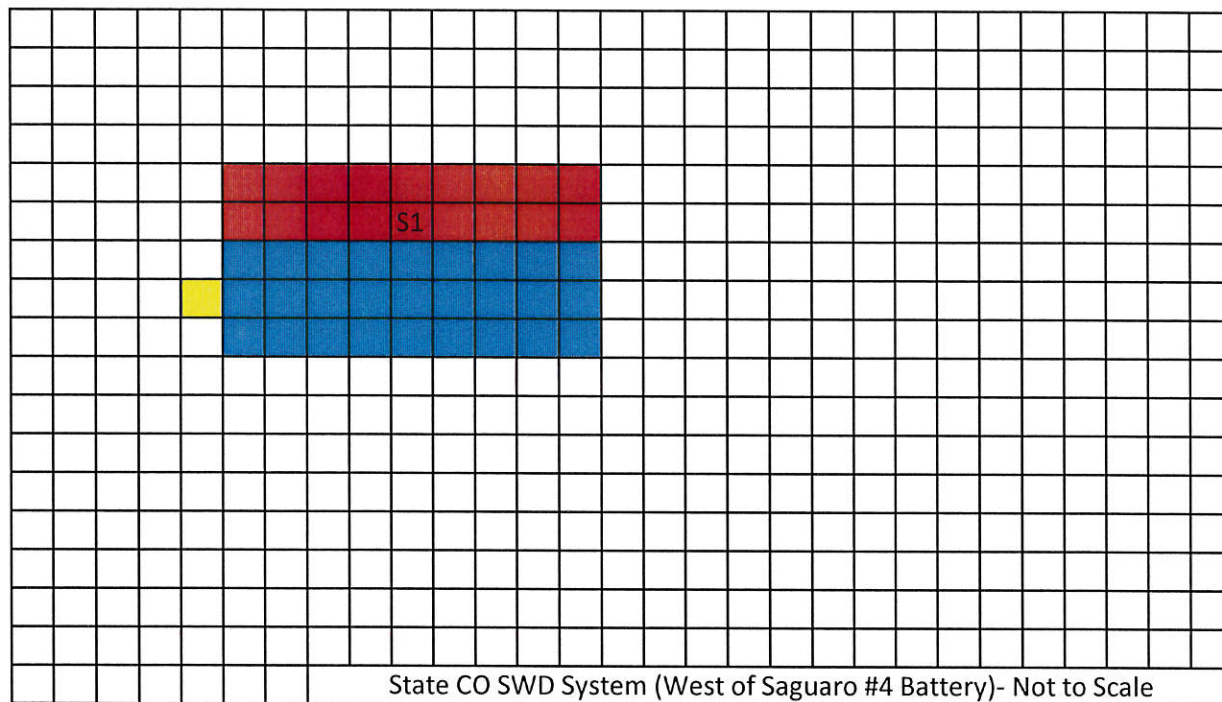
Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

**IV. Soils**

The area consists of soils that are loamy topsoil interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface and an impermeable rock layer at approximately four (4) feet below surface level.

**V. Scope of Work**

Based on enclosed analytical results, the depth to groundwater (230'), and an impermeable rock layer at approximately four (4) feet, Yates Petroleum Corporation will excavate all soils above the impermeable rock layer (approximately 4 feet) and haul excavated material to an NMOCD approved facility for disposal. The excavation will then be back filled with approximately two (2) feet of caliche and two (2) feet of topsoil allowing for repopulation of vegetation. The TPH and BTEX are within the RRAL's for BTEX (50 ppm) and TPH (5000 ppm) for the Total Ranking Score of zero (0), no further analytical testing of TPH and/or BTEX will be conducted (all chloride analytical results are for documentation). When remediation work is completed a C-141 Final Report will be submitted to the NMOCD requesting closure of the site.



Release area



Already Excavated to Rock Layer

S1

Sample Point



Tinhorn

H500756	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
S1-1'	Release Area	3/19/2015	Backhoe	1'	<0.3	<10.0	<10.0	8560
S1-2'	Release Area	3/19/2015	Backhoe	2'	<0.3	<10.0	<10.0	4320
S1-3'	Release Area	3/19/2015	Backhoe	3'	<0.3	<10.0	168	5440
S1-4'	Release Area	3/19/2015	Backhoe	4'	<0.3	<10.0	<10.0	1620

Site Ranking is Zero (0). >100' (230', Section 14, T20S-R24E, Trend Map

All results are ppm. Chlorides for documentation

Released: UNKNOWN ; Recovered: NONE Release Date: 01/29/2015

March 24, 2015

CHASE SETTLE

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: STATE CO SWD SYSTEM (SEGUARO #4)

Enclosed are the results of analyses for samples received by the laboratory on 03/20/15 10:50.

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:	03/20/2015	Sampling Date:	03/19/2015
Reported:	03/24/2015	Sampling Type:	Soil
Project Name:	STATE CO SWD SYSTEM (SEGUARO #4)	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	STATE CO SWD SYSTEM (SEGUARO #4)		

**Sample ID: S1-1 ' (H500756-01)**

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	03/23/2015	ND	1.98	98.8	2.00	7.27	
Toluene*	<0.050	0.050	03/23/2015	ND	1.82	91.2	2.00	6.17	
Ethylbenzene*	<0.050	0.050	03/23/2015	ND	1.75	87.4	2.00	8.17	
Total Xylenes*	<0.150	0.150	03/23/2015	ND	5.29	88.2	6.00	9.28	
Total BTX	<0.300	0.300	03/23/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	8560	16.0	03/23/2015	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	03/23/2015	ND	193	96.3	200	1.27	
DRO >C10-C28	<10.0	10.0	03/23/2015	ND	193	96.7	200	3.23	

Surrogate: 1-Chlorooctane 93.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 98.9 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	03/20/2015	Sampling Date:	03/19/2015
Reported:	03/24/2015	Sampling Type:	Soil
Project Name:	STATE CO SWD SYSTEM (SEGUARO #4)	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	STATE CO SWD SYSTEM (SEGUARO #4)		

**Sample ID: S1-2' (H500756-02)**

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	03/23/2015	ND	1.98	98.8	2.00	7.27	
Toluene*	<0.050	0.050	03/23/2015	ND	1.82	91.2	2.00	6.17	
Ethylbenzene*	<0.050	0.050	03/23/2015	ND	1.75	87.4	2.00	8.17	
Total Xylenes*	<0.150	0.150	03/23/2015	ND	5.29	88.2	6.00	9.28	
Total BTEX	<0.300	0.300	03/23/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 106 % 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	4320	16.0	03/23/2015	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	03/23/2015	ND	193	96.3	200	1.27		
DRO >C10-C28	<10.0	10.0	03/23/2015	ND	193	96.7	200	3.23		

Surrogate: 1-Chlorooctane 98.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 105 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	03/20/2015	Sampling Date:	03/19/2015
Reported:	03/24/2015	Sampling Type:	Soil
Project Name:	STATE CO SWD SYSTEM (SEGUARO #4)	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	STATE CO SWD SYSTEM (SEGUARO #4)		

**Sample ID: S1-3' (H500756-03)**

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	03/23/2015	ND	1.98	98.8	2.00	7.27		
Toluene*	<0.050	0.050	03/23/2015	ND	1.82	91.2	2.00	6.17		
Ethylbenzene*	<0.050	0.050	03/23/2015	ND	1.75	87.4	2.00	8.17		
Total Xylenes*	<0.150	0.150	03/23/2015	ND	5.29	88.2	6.00	9.28		
Total BTEX	<0.300	0.300	03/23/2015	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 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	5440	16.0	03/23/2015	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	03/23/2015	ND	193	96.3	200	1.27		
DRO >C10-C28	168	10.0	03/23/2015	ND	193	96.7	200	3.23		

Surrogate: 1-Chlorooctane 92.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 102 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

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

Received:	03/20/2015	Sampling Date:	03/19/2015
Reported:	03/24/2015	Sampling Type:	Soil
Project Name:	STATE CO SWD SYSTEM (SEGUARO #4)	Sampling Condition:	Cool & Intact
Project Number:	NOT GIVEN	Sample Received By:	Jodi Henson
Project Location:	STATE CO SWD SYSTEM (SEGUARO #4)		

**Sample ID: S1-4' (H500756-04)**

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	03/23/2015	ND	1.98	98.8	2.00	7.27	
Toluene*	<0.050	0.050	03/23/2015	ND	1.82	91.2	2.00	6.17	
Ethylbenzene*	<0.050	0.050	03/23/2015	ND	1.75	87.4	2.00	8.17	
Total Xylenes*	<0.150	0.150	03/23/2015	ND	5.29	88.2	6.00	9.28	
Total BTEX	<0.300	0.300	03/23/2015	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 105 % 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	1620	16.0	03/23/2015	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	03/23/2015	ND	193	96.3	200	1.27	
DRO >C10-C28	<10.0	10.0	03/23/2015	ND	193	96.7	200	3.23	

Surrogate: 1-Chlorooctane 93.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 101 % 52.1-176

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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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Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES  
101 East Marland, Hobbs, NM 88240

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Chase Settle

Company (505) 393-2326 Yates Petroleum Corporation

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4171

Sampler Signature:

e-mail:

[csettle@yatespetroleum.com](mailto:csettle@yatespetroleum.com)

Fax No:

575-748-4131

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

PO #: 205.0750

Project Name: State CO SWD System (Saguaro #4)

Project #:

Project Loc: State CO SWD System (Saguaro #4)

LAB # (lab use only)		FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers								Matrix	Analyze For:															
									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-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	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chlorides	SAR	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT	
1	S1-1'				3/19/2015	8:00 AM		1	X								S	X															X
2	S1-2'				3/19/2015	8:10 AM		1	X								S	X															X
3	S1-3'				3/19/2015	8:20 AM		1	X								S	X															X
4	S1-4'				3/19/2015	8:30 AM		1	X								S	X															X
Special Instructions:																																	
Relinquished by:  Date: 3-20-15 Time: 10:50 Received by:  Date: 3-20-15 Time: 10:50																																	
Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____																																	
Relinquished by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____																																	
Laboratory Comments: Sample Containers Intact? <input checked="" type="checkbox"/> VOCs Free of Headspace? <input checked="" type="checkbox"/> Labels on container(s) <input checked="" type="checkbox"/> Custody seals on container(s) <input checked="" type="checkbox"/> Custody seals on cooler(s) <input checked="" type="checkbox"/> Sample Hand Delivered by Sampler/Client Rep.? <input checked="" type="checkbox"/> by Courier? <input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> DHL <input checked="" type="checkbox"/> FedEx <input checked="" type="checkbox"/> Lone Star <input checked="" type="checkbox"/> Temperature Upon Receipt: #54 0.8°C																																	