

MARTIN YATES, III

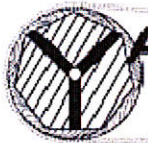
1912-1985

FRANK W. YATES

1936-1986

S.P. YATES

1914-2000



**YATES  
PETROLEUM  
CORPORATION**

105 SOUTH FOURTH STREET

ARTESIA, NEW MEXICO 88210-2118

TELEPHONE (575) 748-1471

JOHN A. YATES  
CHAIRMAN OF THE BOARD

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

JAMES S. BROWN  
CHIEF OPERATING OFFICER

September 15, 2015

Mr. Mike Bratcher  
NMOCD District II  
1301 West Grand  
Artesia, NM 88210

Re: Red Bluff Draw Work Plan  
2RP-2580  
30-015-36913  
Section 27, T25S-R28E  
Eddy County, New Mexico

Dear Mr. Bratcher:

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 November 4, 2014.

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

If you have any questions call me at (575) 748-4217

Thank you.

YATES PETROLEUM CORPORATION

Robert Asher  
NM Environmental Regulatory Supervisor

Enclosure(s)



**Yates Petroleum Corporation**

**Red Bluff Draw Work Plan**

**Section 27, T25S-R28E**

**Eddy County, New Mexico**

**September 15, 2015**

**I. Location**

The release point is located approximately 10 miles south of Malaga, NM and 0.25 miles west of Pecos Highway (US 285), as represented by the attached Red Bluff, NM, USGS Quadrangle Map.

**II. Background**

On November 4, 2014, Yates submitted to the NMOCD District II office a Form C-141 for a release of 20 B/O and 500 B/PW with 15 B/O and 375 B/PW recovered. The total affected area is approximately 330 feet by 1500 feet area. The release was from a buried poly line that failed. Delineation and water samples were taken (10/20/2014, 11/10/2014 & 2/6/2015) and sent to an NMOCD approved laboratory (results enclosed).

**III. Surface and Ground Water**

Area surface geology ranges from Cenozoic to Paleozoic. Groundwater of record is listed on the Chevron Texaco Trend Map shows depth to groundwater approximately 50 feet making the site ranking for this site a ten (10). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

The ranking for this site is ten (10) based on the as following:

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

**IV. Soils**

The area consists of soils that are caliche and loamy top soil and are interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

**V. Scope of Work**

Based on the GL Environmental, Inc. report (July 15, 2015), Yates Petroleum Corporation will delineate sediment soils within the 'Sed 6' of the release area (Red Bluff Draw-Map 4). When the boundaries have been determined that Diesel Range Organics are below 100 mg/L, those impacted soils will be excavated. Those soils will be taken to an approved NMOCD facility. Based on GL Environmental, Inc. report (August 2015, page 8), Hydrocarbon removal/treatment options, the petroleum contamination on the vegetation within the Yates impacted area (west of the Highway 285 bridge, Red Bluff Draw-Map 3, orange outline) will be treated by a low impact means of a 3% Micro Blaze solution applied to all vegetation within the impacted area. If warranted or requested by the grazing lessee, any additional hydrocarbon impacted vegetation or surfaces will be treated with a 3% solution of Micro Blaze. When delineation sampling and remediation work is completed and the diversion ditch is backfilled with the stockpiled soils, a C-141, Final Report will be submitted to the NMOCD and request closure of the site.





**Table 1. Surface water and sediment analytical results**

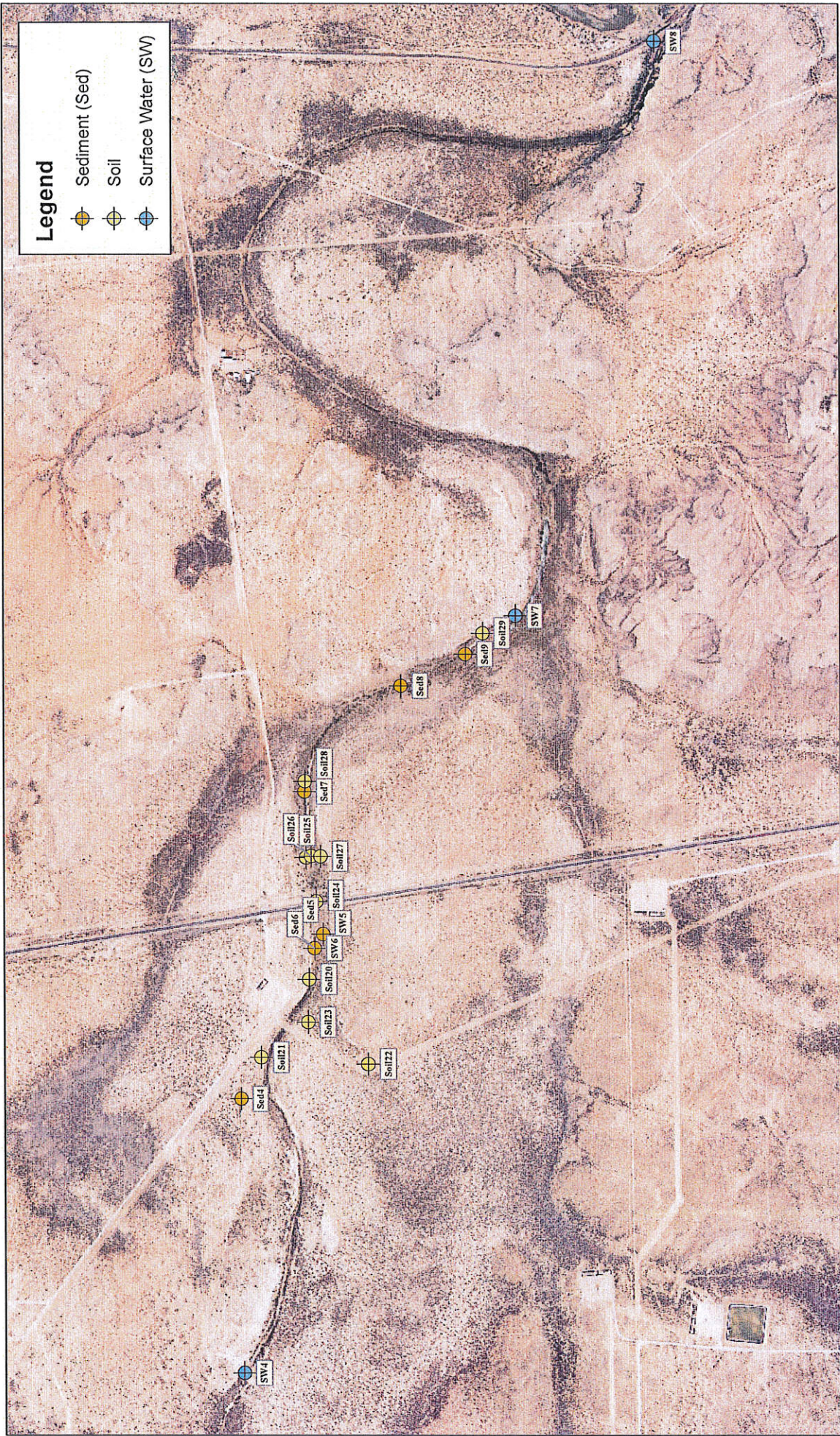
Sample ID	Chloride (mg/L)	Diesel Range Organics - DRO (mg/L)
SW 1	3200	< 1.0
SW 2	1800	< 1.0
SW 3	760	< 1.0
SW 4	670	< 1.0
SW 5	1100	< 1.0
SW 6	1800	1.2
SW 7	1100	< 1.0
SW 8	2300	< 1.0
Sed 1	720	< 9.9
Sed 2	410	< 9.9
Sed 3	240	< 9.7
Sed 4	440	15
Sed 5	220	< 9.6
Sed 6	350	210
Sed 7	190	< 9.6
Sed 8	380	53
Sed 9	170	78

**Table 2. Soil analytical results**

Sample ID	Chloride (mg/L)	Diesel Range Organics - DRO (mg/L)	Sample ID	Chloride (mg/L)	Diesel Range Organics - DRO (mg/L)
Soil 1, 0 - 0.5ft	1600	< 10	Soil 4, 0 - 0.5ft	54	< 9.9
Soil 1, 0.5 - 1.5ft	200	< 10	Soil 4, 0.5 - 1.5ft	130	< 9.8
Soil 1, 1.5 - 2.5ft	190	< 9.8	Soil 5, 0 - 0.5ft	5500	1200
Soil 1, 2.5 - 3.5ft	70	< 9.9	Soil 5, 0.5 - 1.5ft	4600	< 10
Soil 2, 0 - 0.5ft	210	< 10	Soil 5, 1.5 - 2.5ft	3400	< 9.9
Soil 2, 1.0 - 1.5ft	46	< 10	Soil 5, 2.5 - 3.5ft	1900	< 9.8
Soil 2, 1.5 - 2.0ft	63	< 0.10	Soil 5, 3.5 - 4.0ft	2600	< 9.8
Soil 3, 0 - 0.5ft	39	< 9.9	Soil 6, 0 - 0.5ft	35	37
Soil 3, 0.5 - 1.5ft	78	< 10	Soil 6, 0.5 - 1.5ft	77	< 10
Soil 3, 1.5 - 2.5ft	260	< 9.8	Soil 6, 1.5 - 2.5ft	80	< 4.7
Soil 3, 2.5 - 3.5ft	280	< 9.9	Soil 6, 2.5 - 3.5ft	88	< 10
Soil 3, 3.5 - 4.0ft	210	< 10			







**Red Bluff Draw - Map 4**  
**Highway 285 Bridge Sample Area**



cattle. Cattle may ingest contaminated grasses and stir up and mobilize contaminated sediments into the surface water. The fence should enclose an approximate 150 ft buffer on both sides of the channel and include any visibly contaminated areas (See Appendix 1 - Map 2). Unit cost for the installation of a 4-strand barbed fence is \$4 per foot.

#### Additional sediment sampling

The site survey and sampling results have provided sufficient evidence to warrant further investigation within the sediments of the deeper channel areas to determine if contaminants are present at a concentration requiring remediation. Anaerobic conditions within the sediments may slow the breakdown of hydrocarbons and the presence of standing water may result in the transport of contaminants into the subsurface. Therefore, it is important to determine if contaminants are present within these areas through additional sampling. Sampling should be conducted in pools within the remediation area between 0.3 miles west of the Highway 285 bridge to 0.5 miles east of the bridge to identify possible locations with DRO concentrations in excess of 100 mg/kg. The 10 proposed sample locations are presented in Appendix 1 - Map 4.

#### Hydrocarbon removal/treatment options

Visible deposits of petroleum products on the ground surface within the bermed area and immediately east of the bridge should be excavated and hauled off-site for disposal. Identified areas with concentrated surface deposits are approximately 1.5 acres in size and are depicted in Appendix 1 - Map 3. Contaminated sediments should also be excavated from the channel pools within the bermed area. Unit costs associated with loading (backhoe with bucket or bucket loader), hauling and disposing of the contaminated material are presented in Appendix 4. Disposal at permitted landfills are in the \$30 yd<sup>3</sup> range. The approximated total volume of material to be disposed is 1,200 yd<sup>3</sup> cubic yards.

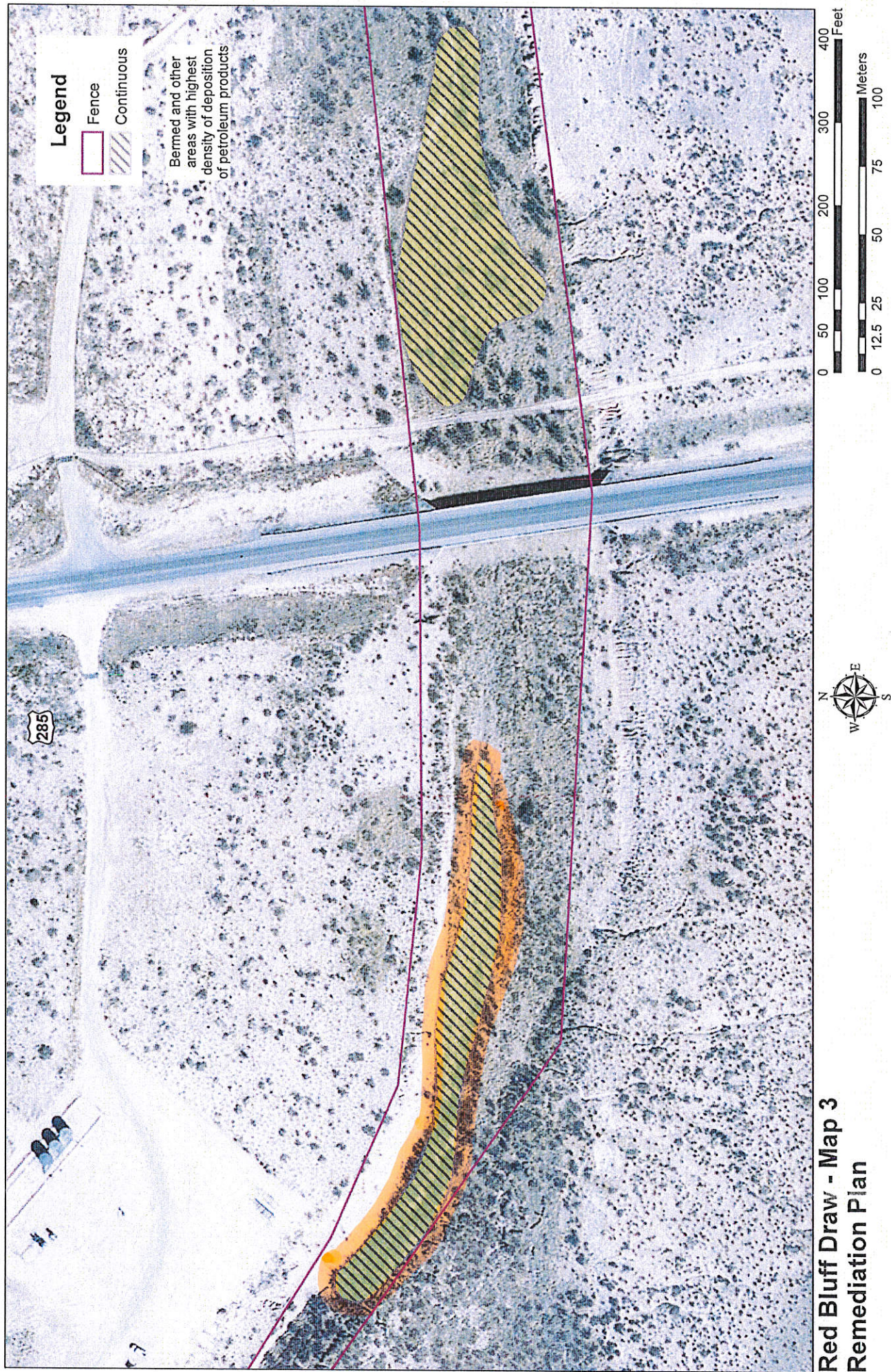
Additionally, the large stretch of water 0.5 mi east of the Highway 285 bridge is not proposed to be fenced to allow cattle access to water. The north end of this pool has a "ring" of oil staining in the vegetation just above the waterline. This contaminated vegetation should be removed with hand tools or other low impact method and hauled off-site for disposal.

Although DRO analytical results from sediments collected downstream of the bermed area were less than 100 mg/kg, significant concentrations were identified in two of the three samples (78 mg/kg and 53 mg/kg). Ten additional sample locations are proposed in the pools within this remediation area to identify possible locations with DRO concentrations in excess of 100 mg/kg (Appendix 1 – Map 4). Identified sediments should be excavated and removed from the site. Costs associated with the removal of this material will depend on the spatial extent and total depth of the contamination.

Significant amounts of petroleum contamination in this stretch of the draw is contained in the vegetation lining the draw channel within the proposed fenced area. This contaminated vegetation should be removed with hand tools or other low impact method and hauled off-site for disposal. Up to 2 acres of vegetation are impacted by petroleum contamination in this reclamation area. Disposal costs associated with contaminated vegetation are presented in Appendix 4.











Analytical Report-H403229 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
WS1	NE corner of Containment	10/20/2014	Water	N/A	<0.006	<1.0	<1.0	670
WS2	Center of Containment	10/20/2014	Water	N/A	<0.006	<1.0	<1.0	680
WS3	Beginning of Containment	10/20/2014	Water	N/A	<0.006	<1.0	<1.0	630
WS4	Approximately 100' upstream	10/20/2014	Water	N/A	<0.006	<1.0	<1.0	600
WS5	Approximately 850' upstream	10/20/2014	Water	N/A	<0.006	<1.0	<1.0	570
Analytical Report-H403583 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
WS1	NE corner of Containment	11/10/2014	Water	N/A	<0.006	<1.0	<1.0	1080
WS2	Center of Containment	11/10/2014	Water	N/A	<0.006	<1.0	<1.0	1260
WS3-1	New Flow of Water	11/10/2014	Water	N/A	<0.006	<1.0	<1.0	660
WS4	Approximately 100' upstream	11/10/2014	Water	N/A	<0.006	<1.0	<1.0	710
WS5	Approximately 850' upstream	11/10/2014	Water	N/A	<0.006	<1.0	<1.0	710

All results are ppm.  - Sample Points



**Red Bluff Draw**  
**30-015-36913**  
**Section 27, T25S-R28E**  
**Eddy County, NM**

#### SAMPLE DIAGRAM

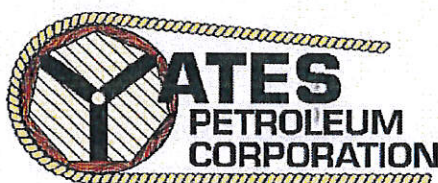
Prepared by Robert Asher  
Environmental Regulatory Division





Analytical Report- H500353 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
SP/A-01.01	NW edge of release area	2/6/2015	Soil	1'	<0.03	<10.0	29.6	80
SP/A-02.0	NW edge of release area	2/6/2015	Soil	2'	<0.03	<10.0	<10.0	<16.0
SP/A-03.0	NW edge of release area	2/6/2015	Soil	3'	<0.03	<10.0	<10.0	<16.0
SP/B-01.01	Edge of containment	2/6/2015	Soil	1'	<0.03	<10.0	<10.0	160
SP/C-01.01	Edge of bridge	2/6/2015	Soil	1'	<0.03	<10.0	<10.0	400

All results are ppm.  - Sample Points



**Red Bluff Draw**  
**30-015-36913**  
**Section 27, T25S-R28E**  
**Eddy County, NM**

#### SAMPLE DIAGRAM

Prepared by Robert Asher  
Environmental Regulatory Division





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

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February 09, 2015

ROBERT ASHER

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: CIGARILLO SWD SYSTEM

Enclosed are the results of analyses for samples received by the laboratory on 02/06/15 10:07.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/A-01.0 (H500353-01)**

Chloride, SM4500CI-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	02/06/2015	ND	400	100	400	3.92	

**Sample ID: SP/A-02.0 (H500353-02)**

Chloride, SM4500CI-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	02/06/2015	ND	400	100	400	3.92	

**Sample ID: SP/A-03.0 (H500353-03)**

Chloride, SM4500CI-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	02/06/2015	ND	400	100	400	3.92	

**Sample ID: SP/B-01.0 (H500353-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	02/06/2015	ND	400	100	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 02/06/2015  
Reported: 02/09/2015  
Project Name: CIGARILLO SWD SYSTEM  
Project Number: 30-015-36913  
Project Location: EDDY COUNTY, NM

Sampling Date: 02/05/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Celey D. Keene

**Sample ID: SP/C-01.0 (H500353-05)****Chloride, SM4500Cl-B****mg/kg****Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>400</b>	16.0	02/06/2015	ND	400	100	400	3.92	

Cardinal Laboratories

\*=Accredited Analyte

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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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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Asher

**Project Name:** Cigarillo SMD System

Comp: (505) 393-2326 Yates Petroleum Corporation

**Project #:** 30-015-36913

Company Address: 105 South 4th Street

Project Loc: Eddy County

City/State/Zip: Artesia, NM 88210

PO #: 205632

Telephone No: 575-748-4217

Fax No:

Sampler Signature:

e-mail:

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

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: H500353

[illegible]

**Special Instructions:** Chlorides on separate report please. ALL results in mg/kg. Thank you.

Relinquished by:

Date \_\_\_\_\_

Time

Received by:

Date \_\_\_\_\_

Time

Relinquished by:

Date \_\_\_\_\_

Time

Received by:

Date 11

lime

Relinquished by:

Date \_\_\_\_\_

Time

Received by:

Date \_\_\_\_\_

Time

Relinquished by:

Date \_\_\_\_\_

Time

Received by EL0T:

Date \_\_\_\_\_

Time

Sample Containers Intact?	X	N
VOCs Free of Headspace?	X	N
Labels on container(s)	X	N
Custody seals on container(s)	X	N
Custody seals on cooler(s)	X	N
Sample Hand Delivered	X	N
by Sampler/Client Rep.?	X	N
by Courier?	UPS	DHL
Temperature Upon Receipt:	FedEx	Lone Star





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

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October 27, 2014

ROBERT ASHER

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: CIGARILLO SWD SYSTEM

Enclosed are the results of analyses for samples received by the laboratory on 10/21/14 14:51.

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).

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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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	10/21/2014	Sampling Date:	10/20/2014
Reported:	10/27/2014	Sampling Type:	Wastewater
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

**Sample ID: WS 1 (H403229-01)**

BTEx 8260B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/22/2014	ND	0.021	105	0.0200	2.91	
Toluene*	<0.001	0.001	10/22/2014	ND	0.019	95.4	0.0200	0.679	
Ethylbenzene*	<0.001	0.001	10/22/2014	ND	0.020	97.6	0.0200	0.307	
<b>Total Xylenes*</b>	<b>0.004</b>	0.003	10/22/2014	ND	0.059	99.0	0.0600	1.34	
Total BTEx	<0.006	0.006	10/22/2014	ND					

Surrogate: Dibromofluoromethane 104 % 88.3-113

Surrogate: Toluene-d8 92.4 % 90.3-115

Surrogate: 4-Bromofluorobenzene 95.2 % 87.2-114

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>670</b>	4.00	10/22/2014	ND	100	100	100	0.00	

TPH 8015M		mg/L		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<1.00	1.00	10/24/2014	ND	43.5	87.0	50.0	0.348	
DRO >C10-C28	<1.00	1.00	10/24/2014	ND	48.4	96.7	50.0	3.69	

Surrogate: 1-Chlorooctane 70.3 % 36.1-161

Surrogate: 1-Chlorooctadecane 122 % 36-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 10/21/2014  
Reported: 10/27/2014  
Project Name: CIGARILLO SWD SYSTEM  
Project Number: 30-015-36913  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/20/2014  
Sampling Type: Wastewater  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: WS 2 (H403229-02)**

BTX 8260B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.001</b>	0.001	10/22/2014	ND	0.021	105	0.0200	2.91	
<b>Toluene*</b>	<b>0.006</b>	0.001	10/22/2014	ND	0.019	95.4	0.0200	0.679	
<b>Ethylbenzene*</b>	<b>0.001</b>	0.001	10/22/2014	ND	0.020	97.6	0.0200	0.307	
<b>Total Xylenes*</b>	<b>0.010</b>	0.003	10/22/2014	ND	0.059	99.0	0.0600	1.34	
<b>Total BTX</b>	<b>0.019</b>	0.006	10/22/2014	ND					

Surrogate: Dibromofluoromethane 106 % 88.3-113  
Surrogate: Toluene-d8 88.3 % 90.3-115  
Surrogate: 4-Bromofluorobenzene 95.2 % 87.2-114

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>680</b>	4.00	10/22/2014	ND	100	100	100	0.00	

TPH 8015M		mg/L		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<1.00	1.00	10/24/2014	ND	43.5	87.0	50.0	0.348	
DRO >C10-C28	<1.00	1.00	10/24/2014	ND	48.4	96.7	50.0	3.69	

Surrogate: 1-Chlorooctane 73.3 % 36.1-161  
Surrogate: 1-Chlorooctadecane 103 % 36-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	10/21/2014	Sampling Date:	10/20/2014
Reported:	10/27/2014	Sampling Type:	Wastewater
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Kathy Perez
Project Location:	EDDY COUNTY, NM		

**Sample ID: WS 3 (H403229-03)**

BTX 8260B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/22/2014	ND	0.021	105	0.0200	2.91	
Toluene*	<0.001	0.001	10/22/2014	ND	0.019	95.4	0.0200	0.679	
Ethylbenzene*	<0.001	0.001	10/22/2014	ND	0.020	97.6	0.0200	0.307	
Total Xylenes*	<0.003	0.003	10/22/2014	ND	0.059	99.0	0.0600	1.34	
Total BTEX	<0.006	0.006	10/22/2014	ND					

Surrogate: Dibromofluoromethane 110 % 88.3-113

Surrogate: Toluene-d8 91.2 % 90.3-115

Surrogate: 4-Bromofluorobenzene 92.4 % 87.2-114

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	630	4.00	10/22/2014	ND	100	100	100	0.00	

TPH 8015M		mg/L		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<1.00	1.00	10/24/2014	ND	43.5	87.0	50.0	0.348	
DRO >C10-C28	<1.00	1.00	10/24/2014	ND	48.4	96.7	50.0	3.69	

Surrogate: 1-Chlorooctane 71.4 % 36.1-161

Surrogate: 1-Chlorooctadecane 111 % 36-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received: 10/21/2014  
Reported: 10/27/2014  
Project Name: CIGARILLO SWD SYSTEM  
Project Number: 30-015-36913  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/20/2014  
Sampling Type: Wastewater  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: WS 4 (H403229-04)**

BTX 8260B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/22/2014	ND	0.021	105	0.0200	2.91	
Toluene*	<0.001	0.001	10/22/2014	ND	0.019	95.4	0.0200	0.679	
Ethylbenzene*	<0.001	0.001	10/22/2014	ND	0.020	97.6	0.0200	0.307	
Total Xylenes*	<0.003	0.003	10/22/2014	ND	0.059	99.0	0.0600	1.34	
Total BTEX	<0.006	0.006	10/22/2014	ND					

Surrogate: Dibromofluoromethane 104 % 88.3-113  
Surrogate: Toluene-d8 90.0 % 90.3-115  
Surrogate: 4-Bromofluorobenzene 89.3 % 87.2-114

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	600	4.00	10/22/2014	ND	100	100	100	0.00	

TPH 8015M		mg/L		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<1.00	1.00	10/24/2014	ND	43.5	87.0	50.0	0.348	
DRO >C10-C28	<1.00	1.00	10/24/2014	ND	48.4	96.7	50.0	3.69	

Surrogate: 1-Chlorooctane 73.1 % 36.1-161  
Surrogate: 1-Chlorooctadecane 111 % 36-171

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 10/21/2014  
Reported: 10/27/2014  
Project Name: CIGARILLO SWD SYSTEM  
Project Number: 30-015-36913  
Project Location: EDDY COUNTY, NM

Sampling Date: 10/20/2014  
Sampling Type: Wastewater  
Sampling Condition: Cool & Intact  
Sample Received By: Kathy Perez

**Sample ID: WS 5 (H403229-05)**

BTEX 8260B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	10/22/2014	ND	0.021	105	0.0200	2.91	
Toluene*	<0.001	0.001	10/22/2014	ND	0.019	95.4	0.0200	0.679	
Ethylbenzene*	<0.001	0.001	10/22/2014	ND	0.020	97.6	0.0200	0.307	
Total Xylenes*	<0.003	0.003	10/22/2014	ND	0.059	99.0	0.0600	1.34	
Total BTEX	<0.006	0.006	10/22/2014	ND					

Surrogate: Dibromofluoromethane 111 % 88.3-113  
Surrogate: Toluene-d8 91.9 % 90.3-115  
Surrogate: 4-Bromofluorobenzene 94.6 % 87.2-114

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	570	4.00	10/22/2014	ND	100	100	100	0.00	

TPH 8015M		mg/L		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<1.00	1.00	10/24/2014	ND	43.5	87.0	50.0	0.348	
DRO >C10-C28	<1.00	1.00	10/24/2014	ND	48.4	96.7	50.0	3.69	

Surrogate: 1-Chlorooctane 69.8 % 36.1-161  
Surrogate: 1-Chlorooctadecane 103 % 36-171

Cardinal Laboratories

\*=Accredited Analyte

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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: Robert Asher

Company Address: 105 South 4th Street

City/State/Zip: Artesia, NM 88210

Telephone No: 575-748-4217

Sampler Signature: *Robert Asher*

Fax No:

e-mail: [boba@yatespetroleum.com](mailto:boba@yatespetroleum.com)

Project Name: Cigarillo SWD System

Project #: 30-015-36913

Project Loc: Eddy County

PO #: 205632

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

(lab use only)

ORDER #: 4403929

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub>	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None	Other (Specify)	DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl)	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.	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
WS1		NA	NA	10/20/2014	1:45 PM		1	X								NP	X												X
WS2		NA	NA	3/5/2014	1:51 PM		1	X								NP	X												X
WS3		NA	NA	3/5/2014	2:06 PM		1	X								NP	X												X
WS4		NA	NA	3/5/2014	2:16 PM		1	X								NP	X												X
WS5		NA	NA	3/5/2014	2:29 PM		1	X								NP	X												X

Special Instructions: Chlorides on separate report please. ALL results in mg/kg. Thank you.

Relinquished by: *Robert Asher* Date: 10/21/14 Time: 9:35 AM Received by: *John Jones* Date: 10/21/14 Time: 2:51

Relinquished by: Date: Time: Received by: Date: Time:

Relinquished by: Date: Time: Received by: Date: Time:

Temperature Upon Receipt: 5.8 °C



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

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November 21, 2014

ROBERT ASHER

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: CIGARILLO SWD SYSTEM

Enclosed are the results of analyses for samples received by the laboratory on 11/20/14 16:30.

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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



**Analytical Results For:**

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

Received: 11/20/2014  
Reported: 11/21/2014  
Project Name: CIGARILLO SWD SYSTEM  
Project Number: 30-015-36913  
Project Location: EDDY COUNTY, NM

Sampling Date: 11/10/2014  
Sampling Type: Water  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: WS #1 (H403583-01)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>1080</b>	4.00	11/21/2014	ND	108	108	100	3.77	

**Sample ID: WS #2 (H403583-02)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>1260</b>	4.00	11/21/2014	ND	108	108	100	3.77	

**Sample ID: WS #3-1 (H403583-03)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>660</b>	4.00	11/21/2014	ND	108	108	100	3.77	

**Sample ID: WS #4 (H403583-04)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>710</b>	4.00	11/21/2014	ND	108	108	100	3.77	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	11/20/2014	Sampling Date:	11/10/2014
Reported:	11/21/2014	Sampling Type:	Water
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Jodi Henson
Project Location:	EDDY COUNTY, NM		

**Sample ID: WS #5 (H403583-05)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	710	4.00	11/21/2014	ND	108	108	100	3.77		

Cardinal Laboratories

\*=Accredited Analyte

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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





February 09, 2015

ROBERT ASHER

YATES PETROLEUM CORPORATION

105 S 4th Street

Artesia, NM 88210

RE: CIGARILLO SWD SYSTEM

Enclosed are the results of analyses for samples received by the laboratory on 02/06/15 10:07.

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/A-01.0 (H500353-01)**

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	02/07/2015	ND	1.73	86.7	2.00	10.8	
Toluene*	<0.050	0.050	02/07/2015	ND	1.66	83.2	2.00	11.2	
Ethylbenzene*	<0.050	0.050	02/07/2015	ND	1.59	79.6	2.00	11.4	
Total Xylenes*	<0.150	0.150	02/07/2015	ND	4.74	79.0	6.00	12.6	
Total BTEX	<0.300	0.300	02/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 61-154

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	02/06/2015	ND	195	97.3	200	2.01		
<b>DRO &gt;C10-C28</b>	<b>29.6</b>	10.0	02/06/2015	ND	193	96.3	200	9.21		

Surrogate: 1-Chlorooctane 100 % 47.2-157

Surrogate: 1-Chlorooctadecane 99.1 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/A-02.0 (H500353-02)**

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	02/07/2015	ND	1.73	86.7	2.00	10.8		
Toluene*	<0.050	0.050	02/07/2015	ND	1.66	83.2	2.00	11.2		
Ethylbenzene*	<0.050	0.050	02/07/2015	ND	1.59	79.6	2.00	11.4		
Total Xylenes*	<0.150	0.150	02/07/2015	ND	4.74	79.0	6.00	12.6		
Total BTEX	<0.300	0.300	02/07/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 61-154

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	02/06/2015	ND	195	97.3	200	2.01	
DRO >C10-C28	<10.0	10.0	02/06/2015	ND	193	96.3	200	9.21	

Surrogate: 1-Chlorooctane 99.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.4 % 52.1-176

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/A-03.0 (H500353-03)**

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	02/07/2015	ND	1.73	86.7	2.00	10.8		
Toluene*	<0.050	0.050	02/07/2015	ND	1.66	83.2	2.00	11.2		
Ethylbenzene*	<0.050	0.050	02/07/2015	ND	1.59	79.6	2.00	11.4		
Total Xylenes*	<0.150	0.150	02/07/2015	ND	4.74	79.0	6.00	12.6		
Total BTEX	<0.300	0.300	02/07/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 61-154

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	02/06/2015	ND	195	97.3	200	2.01		
DRO >C10-C28	<10.0	10.0	02/06/2015	ND	193	96.3	200	9.21		

Surrogate: 1-Chlorooctane 99.2 % 47.2-157

Surrogate: 1-Chlorooctadecane 76.6 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/B-01.0 (H500353-04)**

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	02/07/2015	ND	1.73	86.7	2.00	10.8	
Toluene*	<0.050	0.050	02/07/2015	ND	1.66	83.2	2.00	11.2	
Ethylbenzene*	<0.050	0.050	02/07/2015	ND	1.59	79.6	2.00	11.4	
Total Xylenes*	<0.150	0.150	02/07/2015	ND	4.74	79.0	6.00	12.6	
Total BTEX	<0.300	0.300	02/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

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	02/06/2015	ND	195	97.3	200	2.01	
DRO >C10-C28	<10.0	10.0	02/06/2015	ND	193	96.3	200	9.21	

Surrogate: 1-Chlorooctane 91.1 % 47.2-157

Surrogate: 1-Chlorooctadecane 71.2 % 52.1-176

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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

Received:	02/06/2015	Sampling Date:	02/05/2015
Reported:	02/09/2015	Sampling Type:	Soil
Project Name:	CIGARILLO SWD SYSTEM	Sampling Condition:	Cool & Intact
Project Number:	30-015-36913	Sample Received By:	Celey D. Keene
Project Location:	EDDY COUNTY, NM		

**Sample ID: SP/C-01.0 (H500353-05)**

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	02/07/2015	ND	1.73	86.7	2.00	10.8	
Toluene*	<0.050	0.050	02/07/2015	ND	1.66	83.2	2.00	11.2	
Ethylbenzene*	<0.050	0.050	02/07/2015	ND	1.59	79.6	2.00	11.4	
Total Xylenes*	<0.150	0.150	02/07/2015	ND	4.74	79.0	6.00	12.6	
Total BTEX	<0.300	0.300	02/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 61-154

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	02/06/2015	ND	195	97.3	200	2.01	
DRO >C10-C28	<10.0	10.0	02/06/2015	ND	193	96.3	200	9.21	

Surrogate: 1-Chlorooctane 93.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 74.5 % 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





**Project Name:** Cigarillo SWD System

Project #: 30-015-36913

**Project Loc:** Eddy County

PO #: 205632

Report Format: ☒ Standard ☐ TRRP ☐ NPDES

Telephone No: 575-748-4217 Fax No: \_\_\_\_\_  
 Sampler Signature:  e-mail: \_\_\_\_\_

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

### Analyze For:

(lab use only)

ORDER #: H500353

**Special Instructions:** Chlorides on separate report please. ALL results in mg/kg. Thank you.

**Chlorides on separate report please.** ALL results in mg/kg. Thank you.

Laboratory Comments:

## Sample Containers Intact? VOCs Free of Headspace?

Labels on container(s)  
Custody seals on container(s)

Custody seals on cooler(s)  
Sample Hand Delivered

by Sampler/Client Rep. ? ☒ Y ☐ N  
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.2 °C

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