OIL CONSERVATION DIVISION
RED BLUFF DRAW/COOKSEY RANCH PRELIMINARY REPORT

Introduction:

The New Mexico Oil Conservation Division (OCD) has investigated three reported spill releases into Red Bluff Draw (RBD) on September 19 (COG),26 (Mewbourne Oil Company), and October 15 (Yates). With the exception of the Yates release, these releases were caused by an estimated 18 - 22 inches of precipitation over a 9 day period in southeast New Mexico from 9/18 – 9/26/2014 (see USGS RBD Hydrograph Station Estimate Appendix A). According to USGS Pecos River - Red Bluff, NM Station information near the confluence of Red Bluff Draw and the Pecos River, the average flow rate and gauge height recorded to date are: ~ 253 cfs and ~4 ft. During the height of precipitation and flooding, the flow rate and gauge height maximums were: ~ 30,000 cfs and ~ 22 ft.

OCD Reported Spill Information:

COG

The first notice OCD received on the COG release into Red Bluff Draw was a phone call on Monday, 9/22/14. COG reported one 500 bbl tank missing from the Crossman 25 St Com 1H (30-015-38948) production facility. At that time, COG reported the (single) tank contained 280 bbls oil. OCD later discovered that COG had a total of three steel 500 bbl tanks and two fiberglass 500 bbl tanks wash away. OCD identified four of the tanks during the fly-over, and COG later found the fifth tank during their investigation. On October 2nd the OCD received an Initial-Final C-141 claiming 280bbl crude oil and 100bbl produced water lost. This was denied by the OCD and on October 20th COG sent an amended (Initial only) C-141 to the OCD. The first tank from this location was located ~0.5 miles down the draw (from the facility). The second tank was ~1.25 miles away. Three more tanks were located, in close proximity to each other, ~ 2 miles down the draw (from the facility). On Friday, 10/3/2014, OCD District 2 office staff were able to walk to the three tanks. There was a small amount of oil visible around the two steel tanks, which likely leaked out since the water level receded. The third tank was in pieces, but was a 500 bbl produced water fiberglass tank. OCD observed what appeared to be paraffin covering a large area of vegetation along the flood path. OCD also inspected the Crossman well site. On February 2nd the OCD received a call from Ian Dolly of the Carlsbad State Land Office. Unfortunately in the removal of one of the vessels, the contents were lost. After an inspection by OCD and SLO, OCD contacted COG requesting an immediate clean-up of the visible paraffin from this release. As of today, February 11, 2015, all COG tanks have been removed. No further remediation or contamination investigation efforts have been made.

COG tank

Paraffin from COG tanks

COG Crossman 25 State #1H well pad

Mewbourne

OCD received immediate notification on September 26th and a C-141 from Mewbourne for their ruptured flow line release of crude oil and produced water into Red Bluff Draw (2RP-2532). Mewbourne reports an estimated 1,726 bbls total fluid released, with 253 bbls oil and 267 bbls produced water with "rainwater" mix, recovered. This is the volume recovered by the vacuum truck/skimmer operation. Some additional quantity, but unquantified, volume of oil has been recovered with the booms and absorbent pads. Mewbourne's salt water disposal flow line was likely breached during the high point of the flood, releasing fluid during the flood, but after the flood waters receded, the ruptured polyline was still active to some degree, likely causing the impacts of crude oil and produced water from the draw, on the east side of US Hwy. 285. OCD District 2 staff inspected the site on September 30th and October 3rd. Mewbourne hired Talon/LPE to perform the remediation. Talon's initial report is below.

Mewbourne release inspection 9.30.2014

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Amarillo, Texas 79107
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Fax 806.467.0622

ARTESIA
408 West Texas Ave.
Artesia, New Mexico 88210
Phone 575.746.8768
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318 East Taylor Street
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MIDLAND
2901 State Hwy 349
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SAN ANTONIO
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ENVIRONMENTAL CONSULTING
ENGINEERING
DRILLING
CONSTRUCTION
SPILL MANAGEMENT
GENERAL CONTRACTING

Toll Free: 866.742.0742
www.talonlpe.com

December 16, 2014

Mr. Mike Bratcher
NMOCD District 2
811 S. 1st Street
Artesia, NM 88210

Subject: **Remediation and Sampling Report**
Mewbourne Oil Company
San Lorenzo SWD No. 1
API: 30-015-23067, 2RP-2532

Dear Mr. Bratcher,

Mewbourne Oil Company (MOC) contracted Talon/LPE (Talon) to perform remediation and sampling services at the above referenced location. The results of our completed remedial actions, soil and surface water sampling program and closure request for this phase of the project are submitted herein.

Background Information

The San Lorenzo SWD No.1 is located approximately 12 miles southeast of Loving, New Mexico. The legal location for this release is Unit Letter H, Section 34, Township 25 South, and Range 28 East in Eddy County, New Mexico. More specifically the latitude and longitude for the release are 32.086841 North and -104.069744 West. A site plan is presented in Appendix I.

According to the soil survey provided by the United States Department of Agriculture National Resources Conservation Services, the soil in this area is made up of Karro fine sandy loam with 0 to 3 percent slopes. Per the New Mexico Bureau of Geology and Mineral Resources, the local surface and shallow geology is made up of the Rustler Formation, upper Permian Age, comprised of siltstone, gypsum, sandstone, dolomite. Groundwater in the project vicinity is approximately 0-5 feet below ground surface (bgs).

The ranking for this site is 20 based on the following:

Depth to ground water	<50’
Wellhead Protection Area	>1000’
Distance to surface water body	<1000’

Incident Description

On September 26, 2014, the SWD line running along the west side of Highway 285 from the San Lorenzo SWD to the Delaware Ranch SWD was damaged in the draw between mile marker 6 and 7 by debris and rising flood waters causing a release of 1726 barrels mixed fluids. Upon discovery, approximately 253 barrels of oil and 267 barrels of water were immediately recovered utilizing vac trucks. The area affected was approximately 6,000-feet in length from the bridge south down the draw. The Initial C-141 is presented in Appendix II.

Remedial Actions Taken

Between September 30 and October 16, 2014, Talon mobilized personnel to the release location. Absorbent pads and booms were used for hand-recovery of free phase oil. The impact soil was hand-excavated and stockpiled on plastic sheeting and construction bags were used to dispose of the oily pads and booms. One truck load of contaminated soil and sorbent media was disposed of at Lea Land, LLC, an approved NMOCD disposal faculty. See Appendix III for the disposal manifest.

On November 6, 2014 Talon/LPE mobilized personnel to obtain surface water samples and on November 26, 2014 soil sampling from bank sediments was completed. See Table 1 below for resulting lab data analysis. A site map presenting surface water (W-1), soil/sediment (S-1) and background (BG-1) soil sampling is attached hereto in Appendix I.

All soil samples were collected by Talon personnel wearing clean nitrile gloves. The soil samples were placed in laboratory provided sample containers, iced and transported to Cardinal Laboratories in Hobbs, New Mexico for analysis. The samples were tested for volatile organics (BTEX) via EPA Method 8021B (soil) and EPA Method 8026B (water), TPH (Total Petroleum Hydrocarbons) using EPA Method 8015M and Total Chlorides by Method SM 4500Cl-B.

Laboratory Results

See Appendix IV for complete laboratory reports.

November 12, 2014 Table 1

Sample ID	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO	TPH (mg/kg) EXT DRO
W-1	<0.006	840	<1.00	<1.00	<1.00
W-2	<0.006	600	<1.00	<1.00	<1.00
W-3	<0.006	630	<1.00	<1.00	<1.00

Table 1, cont.

Sample ID	Depth (feet)	BTEX (mg/kg)	Chlorides (mg/kg)	TPH (mg/kg) GRO	TPH (mg/kg) DRO
S-1	0	<0.300	1300	<10	<10
	0.5	<0.300	1700	<10	<10
S-2	0	<0.300	112	<10	<10
	0.5	<0.300	48	<10	<10
S-3	0	<0.300	112	<10	<10
	0.5	<0.300	96	<10	<10
BG-1	0	<0.300	32	<10	<10
BG-2	0	<0.300	9060	<10	<10
BG-3	0	<0.300	9200	<10	<10

Based upon the site ranking of **20**, the NMOCD Recommended Remedial Action Levels (RRAL's) are 50 mg/kg for BTEX, 10 mg/kg for Benzene and 100 mg/kg for TPH.

Closure

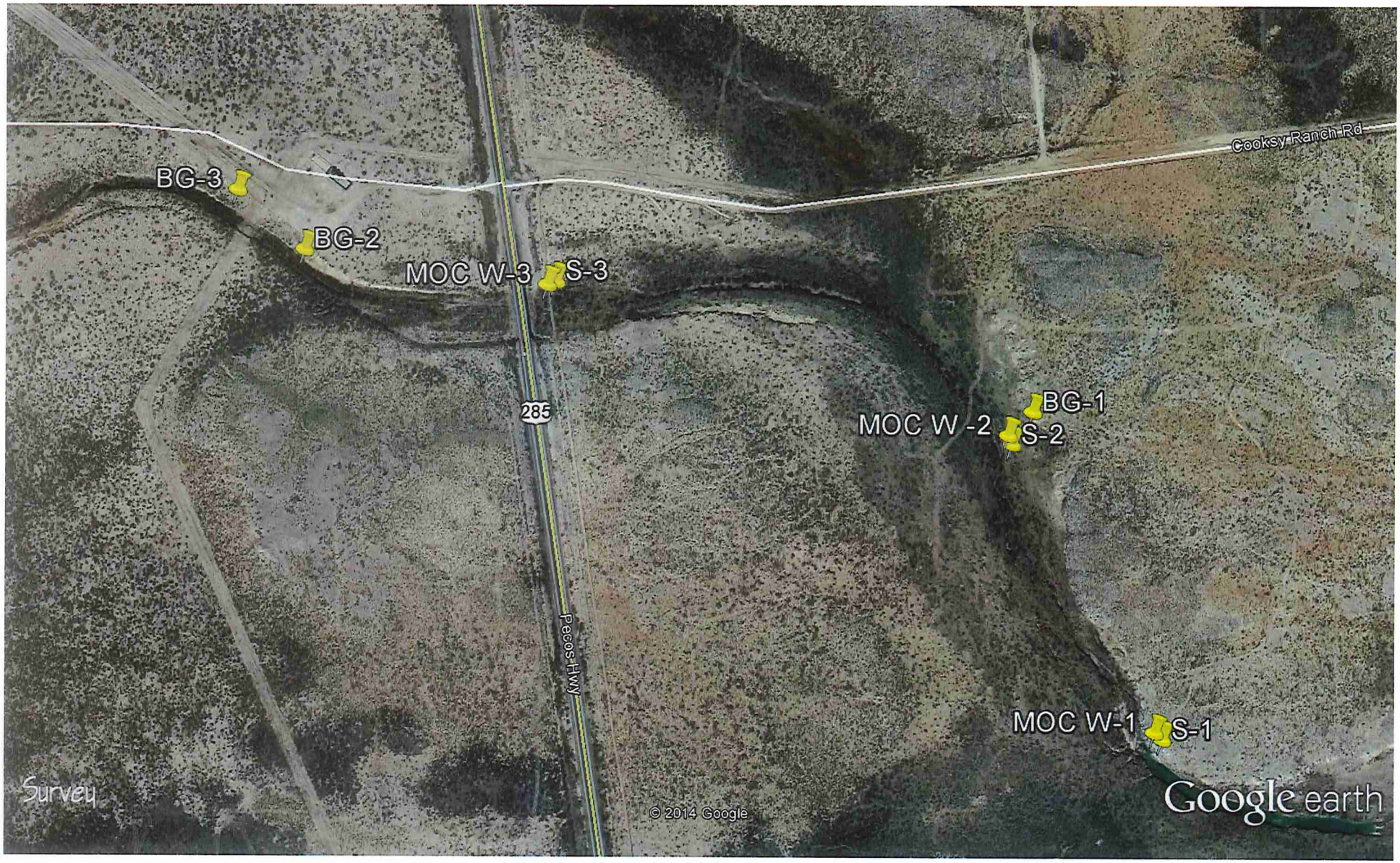
On behalf of the Mewbourne Oil Company, we respectfully request that no further actions be required and that closure with respect to this portion of this project be granted.

If we can provide additional information or be of further assistance please contact our office at 575.746.8768.

Respectfully submitted,

TALON/LPE

David J. Adkins
District Manager



Google earth

feet 3000
km 1

Yates

On October 15th, 2014 Yates Petroleum had a buried flow line rupture that originated approximately 1000 feet south of Red Bluff Draw. According to Yates reporting, this release included 20bbl of crude oil and 500bbl of produced water. Contaminants flowed north, across the pasture and into Red Bluff Draw. Ms. Joy Cooksey, the state surface lessee, contacted the OCD upon discovering the rupture and OCD district 2 staff conducted onsite inspections on October 16th and the 22nd. On October 16th Yates had repaired the flow line, bermed part of the draw to prevent contaminants from flowing downstream, and constructed a fence to keep livestock out the flow path. Yates remediation is ongoing and an initial report sent in from Yates is below. Yates has obtained another round of samples in the draw, which are currently being processed by the lab.

Yates release impact on pasture 10.16.2014 inspection

10.22.2014 inspection Yates remediation in Red Bluff Draw

YATES PETROLEUM CORPORATION

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

January 5, 2015

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

Re: Cigarillo SWD System (SE of the Bonbon BNN State Com. #1-H)
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 January 12, 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

Cigarillo SWD System Work Plan

Section 27, T25S-R28E

Eddy County, New Mexico

January 5, 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. Initial impacted soils were excavated to depths between 12" and 24" and hauled to an approved NMOCD facility. Delineation samples were taken (11/13/2014) 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:

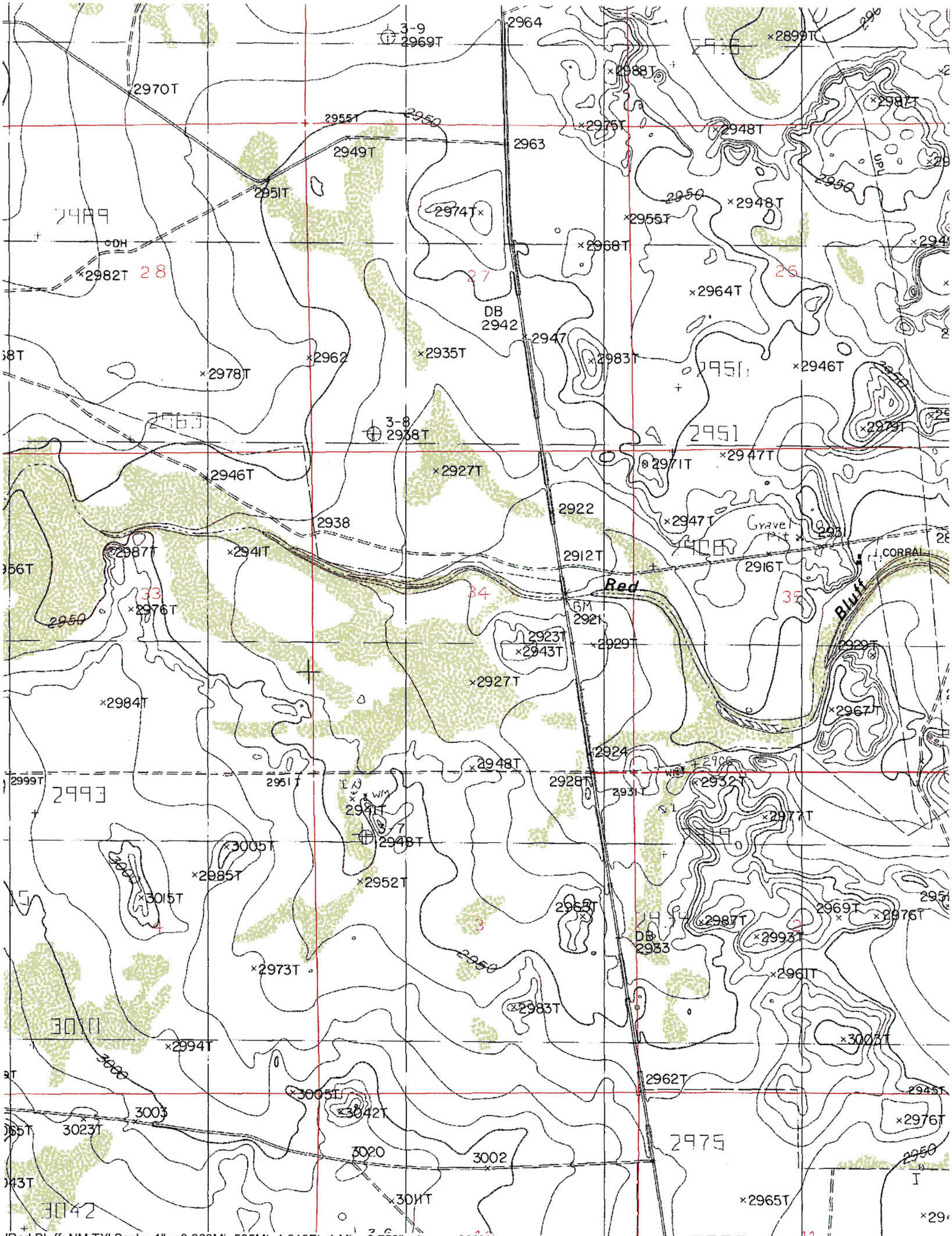
Depth to ground water	50-99'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

IV. Soils

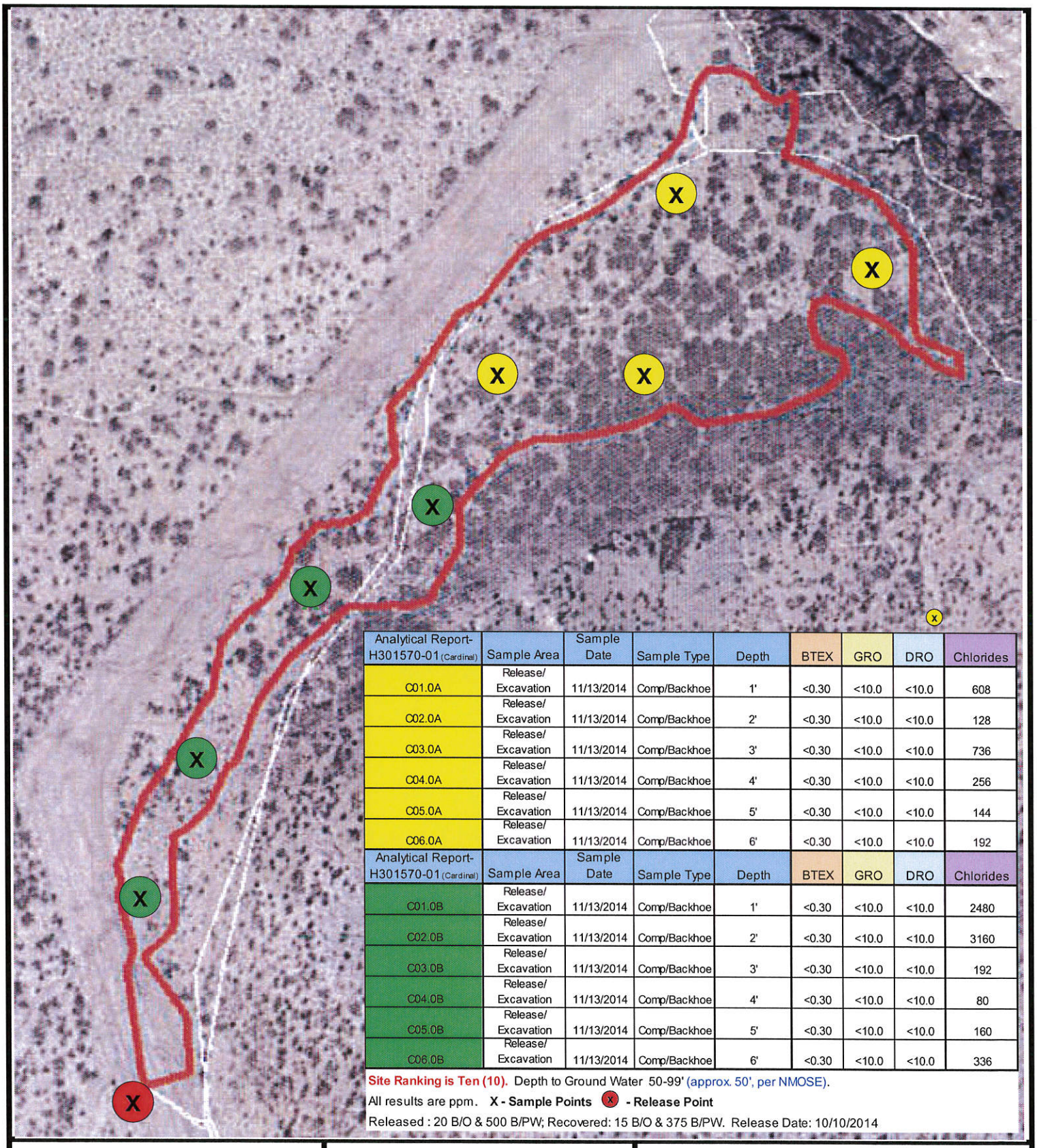
The area consists of soils that are caliche and loamy top soil and are interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface.

V. Scope of Work

Based on analytical results, Yates Petroleum Corporation will excavate two (2) feet of impacted soils within the release area designated in green on the enclosed sample diagram. Those soils will be taken to an approved NMOCD facility. Based on analytical results enclosed there is a decrease in chlorides, the TPH & BTEX are within the RRAL's for BTEX (50 ppm) and TPH (1000 ppm) for the Total Ranking Score of ten (10) within the entire release are, no further sampling will be conducted. When remediation work is completed a C-141, Final Report will be submitted to the NMOCD and request closure of the site. Upon Final C-141 approval the release area designated in green where further excavation work will be conducted (removal of 24" of impacted soils), like soils will be brought in and backfilled and the entire release area will be contoured to match current grade of surface.



'Red Bluff; NM,TX' Scale: 1" = 0.363Mi 585Mt 1,918Ft, 1 Mi = 2.753" , 1 cm = 230Mt



Analytical Report-H301570-01 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
C01.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	1'	<0.30	<10.0	<10.0	608
C02.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	2'	<0.30	<10.0	<10.0	128
C03.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	3'	<0.30	<10.0	<10.0	736
C04.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	4'	<0.30	<10.0	<10.0	256
C05.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	5'	<0.30	<10.0	<10.0	144
C06.0A	Release/ Excavation	11/13/2014	Comp/Backhoe	6'	<0.30	<10.0	<10.0	192
Analytical Report-H301570-01 (Cardinal)	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	Chlorides
C01.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	1'	<0.30	<10.0	<10.0	2480
C02.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	2'	<0.30	<10.0	<10.0	3160
C03.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	3'	<0.30	<10.0	<10.0	192
C04.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	4'	<0.30	<10.0	<10.0	80
C05.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	5'	<0.30	<10.0	<10.0	160
C06.0B	Release/ Excavation	11/13/2014	Comp/Backhoe	6'	<0.30	<10.0	<10.0	336

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 50', per NMOSE).

All results are ppm. **X - Sample Points** (X) **- Release Point**

Released : 20 B/O & 500 B/PW; Recovered: 15 B/O & 375 B/PW. Release Date: 10/10/2014

YATES PETROLEUM CORPORATION

Cigarillo SWD System

30-015-36913

Section 27, T25S-R28E

Eddy County, NM

SAMPLE DIAGRAM

Prepared by Robert Asher
Environmental Regulatory Division

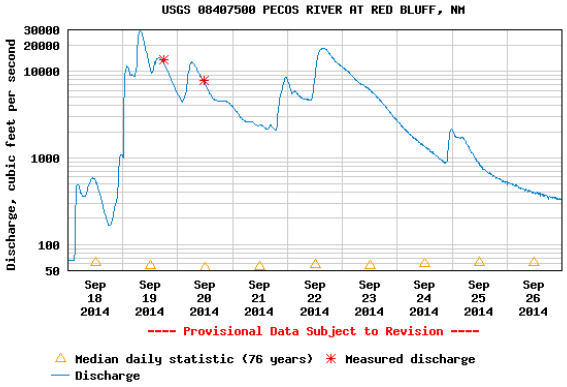
Contact Information

NMOCD District 2 Environmental Specialists
Mike Bratcher
(575)748-1283 ext. 108
Heather Patterson
(575)748-1283 ext. 101

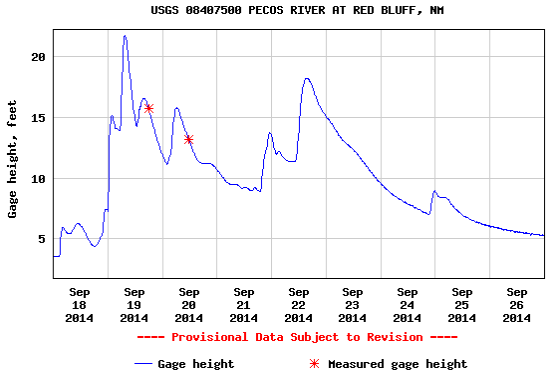
Appendix A

USGS Hydrographic & Water Quality Information (9/10/2014 – 10/9/2014):
http://waterdata.usgs.gov/nm/nwis/uv?cb_00060=on&cb_00065=on&format=gif_default&site_no=08407500&period=&begin_date=2014-9-10&end_date=2014-10-09

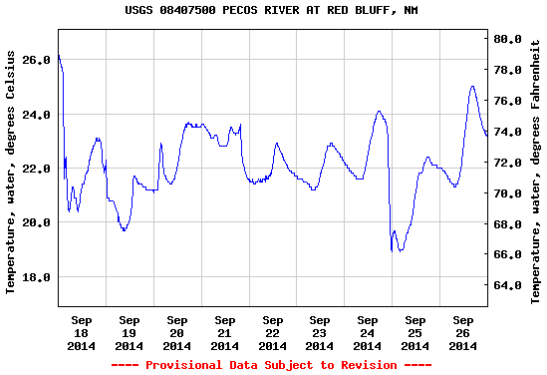
Discharge, cubic feet per second
Most recent instantaneous value: 112 10-14-2014 06:45 MDT



Gage height, feet
Most recent instantaneous value: 3.97 10-14-2014 06:45 MDT



Temperature, water, degrees Celsius
Most recent instantaneous value: 17.6 10-14-2014 06:45 MDT



Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius
Most recent instantaneous value: 10,740 10-14-2014 06:45 MDT