


AP - 095

**GENERAL
CORRESPONDENCE**

2008



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



AUGUST 22, 2008

Mr. Tom Morrow
St. Mary Land & Exploration Company
3300 N. A Street, Bldg #7, Suite 200
Midland, TX 79705

**RE: REQUIREMENT TO SUBMIT ABATEMENT PLAN
ST. MARY LAND & EXPLORATION COMPANY
HOPI FEDERAL NO. 2 RESERVE PIT SITE
UNIT "L", SECTION 1, TOWNSHIP 25 SOUTH, RANGE 28 EAST
EDDY COUNTY, NEW MEXICO
AP095**

Dear Mr. Morrow:

The Oil Conservation Division (OCD) has determined that, based on the notification submitted by Tetra Tech on July 25, 2008, St. Mary Land & Exploration Company (St. Mary) must submit a Stage 1 Abatement Plan in accordance with OCD's Rule 19 (19.15.1.19 NMAC) to investigate ground water contamination at its St. Mary Land & Exploration Company Hopi Federal No. 2 reserve pit site located in Unit "L", Section 1, Township 25 South, Range 28 East, Eddy County, New Mexico. The Stage 1 Abatement Plan proposal must be submitted to the OCD Santa Fe Office with a copy provided to the OCD Artesia District Office and must meet of all the requirements specified in OCD Rule 19 (19.15.1.19 NMAC), including, but not limited to, the public notice and participation requirements specified in OCD Rule 19G. The Stage 1 Abatement Plan is due sixty (60) days from the receipt by St. Mary of this written notice.

St. Mary's Stage 1 Abatement Plan must meet all of the requirements specified in OCD Rule 19E.3, including, but not limited to, a site investigation work plan and monitoring program that will enable it to characterize the chloride release using an appropriate number of isoconcentration maps and cross sections and to provide the data necessary to select and design an effective abatement option.



Mr. Tom Morrow

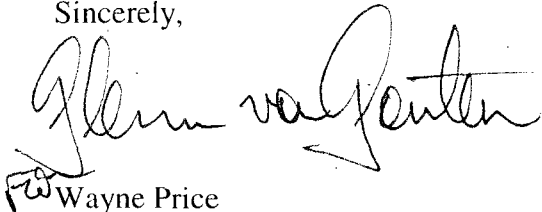
August 22, 2008

Page 2

OCD reminds St. Mary that it was required, pursuant to OCD Rule 116, to submit immediate verbal notice and *timely written notice* to OCD when it determined that ground water had been impacted. St. Mary must submit also submit with its work plan, all appropriate information and plans and any other relevant information, including all relevant details of the pit (fluids handled, dimensions, volume, dates of operations, liner thickness, *etc.*) and details of any actions that St. Mary has already taken.

St. Mary should submit one paper copy with and an electronic copy on CD to OCD's Santa Fe office and one paper copy to OCD's Artesia District Office of all future workplans and/or reports. Please include "**OCD Case No. AP095**" on all future correspondence. If you have any questions, please contact Glenn von Gonten of my staff at (505) 476-3488.

Sincerely,

A handwritten signature in cursive script, appearing to read "Glenn von Gonten". To the left of the signature is a small, stylized monogram or set of initials, possibly "W" or "WP".

Wayne Price

Environmental Bureau Chief

WP/gvg

cc: Tim Gum, OCD District 2
Mike Bratcher, OCD District 2

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company St Mary Land & Exploration Co.	Contact Tom Morrow
Address 3300 N. A Street, Bldg #7 Suite 200 Midland, Texas 79705	Telephone No. (432) 688-1773
Facility Name Hopi Federal #2	Facility Type Well Location

Surface Owner State	Mineral Owner Federal	Lease No. API #: 30-015-30819
---------------------	-----------------------	-------------------------------

LOCATION OF RELEASE

Unit Letter F	Section 1	Township 25S	Range 28E	Feet from the	North/South Line	Feet from the	East/West Line	County Eddy
------------------	--------------	-----------------	--------------	---------------	------------------	---------------	----------------	----------------

Latitude 32.16075 Longitude 104.06832

NATURE OF RELEASE

Type of Release Drilling reserve pit	Volume of Release unknown	Volume Recovered 0
Source of Release Drilling reserve pit	Date and Hour of Occurrence N/A	Date and Hour of Discovery N/A
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher	
By Whom? Tim Reed	Date and Hour 6/13/08 4:00 P.M.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

St Mary Land & Exploration acquired this property, The drilling pit for this location had not been closed.

Describe Area Affected and Cleanup Action Taken.*

Following approval of the C-144 pit contents were removed and transported to proper disposal. Samples were collected from 5 locations from the bottom of the reserve pit.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <u>Donna Huddleston</u>	OIL CONSERVATION DIVISION		
Printed Name: <u>DONNA HUDDLESTON</u>	Approved by District Supervisor:		
Title: <u>Production Tech</u>	Approval Date:	Expiration Date:	
E-mail Address: <u>dhuddleston@stmaryland.com</u>	Conditions of Approval:		Attached <input type="checkbox"/>
Date: <u>8/21/08</u>	Phone: <u>432-688-1789</u>		

Attach Additional Sheets If Necessary

APO95



TETRA TECH RECEIVED

2008 AUG 7 PM 3 47

CERTIFIED MAIL

RETURN RECEIPT NO. 7002 2410 0000 1387 9239

July 25, 2008

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

RE: NOTIFICATION OF GROUNDWATER IMPACT
St. Mary Land & Exploration Company
Hopi Federal #2 (Reserve Pit Site)
UNIT "L", SEC. 1 T25S, R28E
Eddy County, New Mexico

Mr. Price:

Tetra Tech (formerly Highlander Environmental Corp.) on behalf of St. Mary Land & Exploration Company (St. Mary) notifies the Director of the New Mexico Oil Conservation Division (OCD), Environmental Bureau of groundwater impact at the above-referenced site in accordance with NM Rule 116. The site location is shown on Figures 1 and 2. The remediation of this site may be subject to NM Rule 19 procedures.

St. Mary retained Tetra Tech to assist in the closure of the Hopi Federal #2 reserve pit. St. Mary Land recently acquired the property from Nance Petroleum Corporation. The Hopi Federal #2 reserve pit was open and not properly closed. In order to close the reserve pit, a C-144 was submitted to the NMOCD for approval. According to published data, the depth to groundwater was reported less than 50' below surface. Once approved, the pit contents (drilling muds) were excavated and transported to proper disposal.

Once the drilling contents were removed, the bottom of the reserve pit was assessed to evaluate the subsurface soil. Test trenches and boreholes were installed in the bottom of the reserve pit to define the vertical extents. The sample results showed chloride concentrations decline with depth. However, some of the areas were not vertically defined. In order to determine depth to groundwater, a temporary well (TMW-1) was

drilled on the south edge of the well pad. Groundwater was encountered at approximately 39 feet below ground surface (bgs). To assess the groundwater qualities, a total of (3) monitor wells were installed around the reserve pit. The monitor wells and temporary well locations are shown on Figure 3.

After appropriate development, the wells were sampled pursuant to OCD guidelines and sent to Trace Analysis of Lubbock, Texas for chloride analysis. The well (MW-3) located south of the reserve pit was dry. The remaining wells (TMW-1, MW-1 and MW-2) were purged and sampled. Chloride concentrations in all of the wells exceeded New Mexico Water Quality Control Commission standards at 708 mg/L (MW-1), 1,820 mg/L (MW-2) and 460 m/L (TMW-1). Wells TMW-1 and MW-1 (up-gradient) may be indicative of background qualities in this area of the county. MW-2 appears to show an elevated chloride concentration.

Tetra Tech will present a remedy for this site in the submission of a Corrective Action Plan. Please accept this notification for the above-referenced site. Should you have any questions or concerns regarding this site, please do not hesitate to contact me.

TETRA TECH



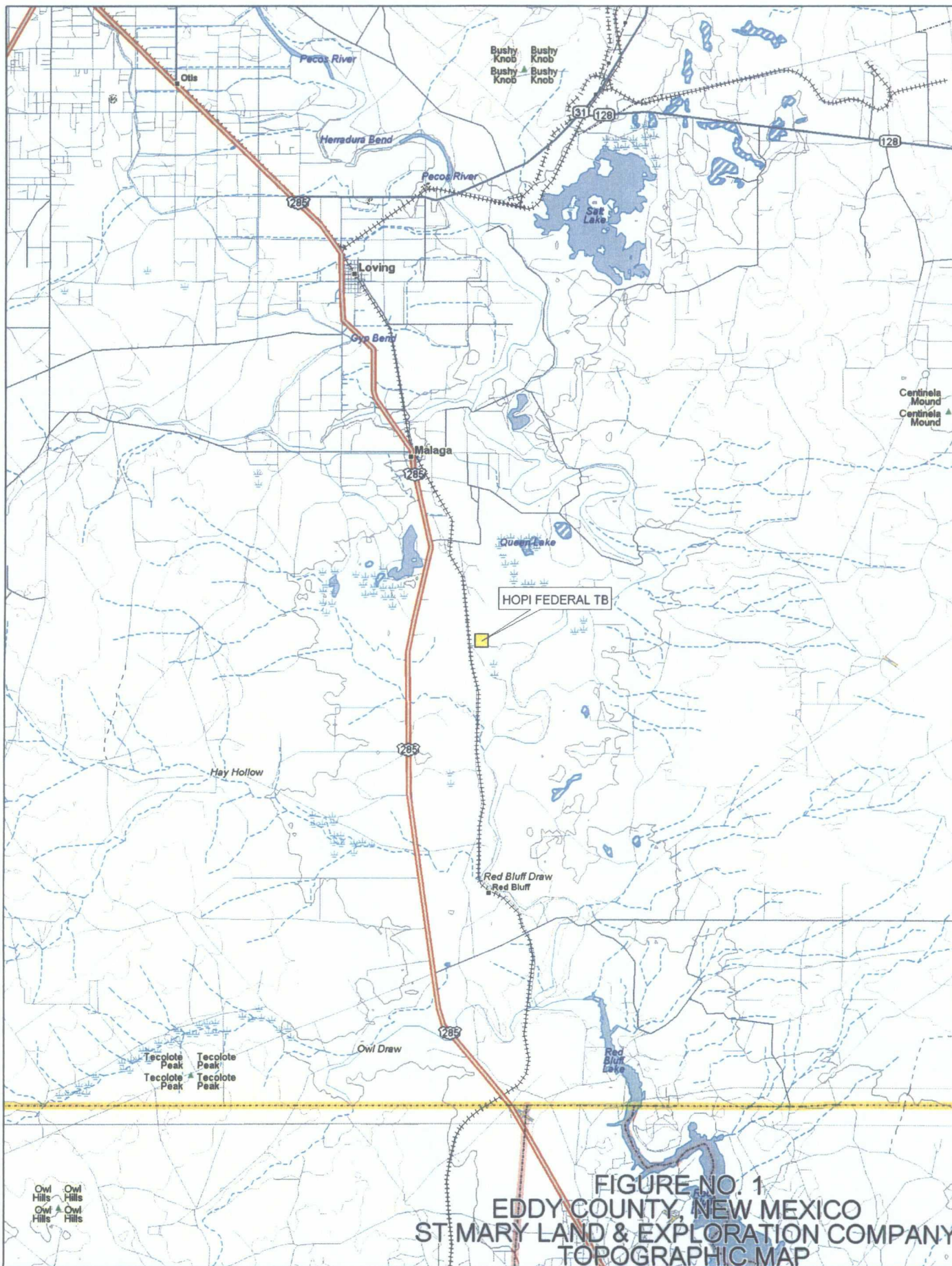
Ike Tavarez, P.G.
Senior Environmental Geologist

enclosures: figures and table

cc: NMOCD-Mike Bratcher

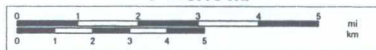


Midland, TX 79705
Tel 432.682.4559 Fax 432.682.3946
www.tetrattech.com



© 2002 DeLorme. 3-D TopoQuads®. Data copyright of content owner.
www.delorme.com

Scale 1 : 200,000
 1" = 3.16 mi



~~CONFIDENTIAL~~



EDDY COUNTY, NEW MEXICO

**ST. MARY LAND
& EXPLORATION**

**HOPI FED #2
RESERVE PIT**

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 7/18/08

DWG. BY:

FILE: 802573001

NOT TO SCALE

MONITOR WELL

Table 1
St Mary Exploration & Exploration Company
Groundwater Analytical Results
Hopi Federal #2 Reserve Pit
Eddy County, New Mexico

Monitor well	Date Sampled	Dissolved Calcium (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Sodium (mg/L)	Dissolved Potassium (mg/L)	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalinity (mg/L)	Sulfate (mg/l)	Chloride (mg/L)	TDS (mg/L)	Hardness (mg/L)	pH
MW-1	07/09/08	-	-	-	-	-	-	-	-	765	-	-	-
	07/14/08	737	233	145	12.3	<1.0	58	58	1610	708	3040	2800	7.26
MW-2	07/09/08	-	-	-	-	-	-	-	-	2,040	-	-	-
	07/14/08	793	345	960	16.8	<1.0	181	181	1940	1820	6340	3400	7.2
MW-3	07/09/08												
TMW-1	07/09/08	-	-	-	-	-	-	-	-	477	-	-	-
	07/14/08	692	80.4	132	6.16	<1.0	167	167	1540	460	2940	2060	7.54

DRY

(-) Not Analyzed