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 ubmit 2 Copies to appropriate

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

Release Notification and Corrective Action													
					OI	PERATOR							
Name of Company ConocoPhillips Company						Contact Mickey Garner							
Address 3300 North A St. Bldg 6, Midland, TX 79705-5													
Facility Name EVGSAU 2622-002						Facility Typ	e Oil and Ga	<u>s</u>					
Surface Owner State of New Mexico Mineral O						State of Ne	w Mexico		Lease No	30-025-2	6573	i-00-00	
LOCATION OF RELEASE													
Unit Letter	Section	Township	Range	Feet from the	Nort	th/South Line	Feet from the	East/West Line   County					
G	26	17S	35E					Lea					
Latitude N 32 48.417 Longitude W 103 25.763  NATURE OF RELEASE													
Type of Release Crude oil and produced water						lume of Release	Volume Recovered						
Source of Re		ced water	····			bbl (70il, 68wa		(6oil, 52water)  Date and Hour of Discovery					
2" steel flowline						2/28/2008 0900			2/28/2008 1600				
Was Immediate Notice Given?  ☐ Yes ☐ No ☐ Not Required					1	If YES, To Whom? Chris Williams							
By Whom?						e and Hour 2/	29/2008 0940						
By Whom? Mickey Garner Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.							
☐ Yes ⊠ No					1	N/A							
If a Watercou													
Describe Cause of Problem and Remedial Action Taken.*  On Thursday February 28, 2008 at 1600 hrs a leak was discovered coming from a buried 2" steel flowline on EVGSAU 2622-002 due to external corrosion. Amount spilled was 7 bbls of oil and 68 bbls of produced water. The spill was not contained and affected approximately 6100 sq/ft of roadway and pasture													
Describe Area Affected and Cleanup Action Taken.*  The MSO shut in the well and called a vacuum truck to pick up free liquids. 6 bbls of oil and 52 bbls of produced water were recovered. The spill site will be delineated and remediated in accordance with NMOCD guidelines. Chloride concentration for this well is 51,000.													
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:						OIL CONSERVATION DIVISION							
Printed Name: Mickey Garner						Approved by District MANIFORMENTAL ENGINEER							
Title: HSER Lead						Approval Date: 3.25.08 Expiration Date: 5.25.08				08			
E-mail Address: Mickey.D.Garner@conocophillips.com						Conditions of Approval:  SEND ALL (DUER 750 PPM)  Attached							
Date: 2-20-2008 Dhone: 575 301 3159						C15-0212 100000 7011 1PD # 1823						1873	



March 26, 2008

Mr. Larry Johnson New Mexico Oil Conservation Division 1625 N. French Dr Hobbs, New Mexico 88240

RE: EVGSAU 2622.002 Flowline Work Plan

Lea County, New Mexico Unit G, Sec. 26, T17S, R35E

#### Dear Mr. Johnson:

On-behalf of ConocoPhillips Company, Tetra Tech is submitting this work plan to conduct a subsurface investigation at East Vacuum Glorietta, Grayburg, San Andres Unit (EVGSAU) 2622 Well # 002 Flowline (Site; Figure 1). This work is in support of ConocoPhillips efforts to delineate and remediate a recent 58 barrel mixed crude oil/produced water release at the Site (C141 Attached). The well is located approximately 1.6 miles northwest of the ConocoPhillips Buckeye office in Lea County, New Mexico (Figure 1; 32.80722°N, 103.42916°W). The State of New Mexico is the land administrator.

The Site is located in the Llano Estacado region of the Southern Great Plains. It is a large southeast-sloping plateau consisting of a nearly level to very gently undulating constructional plain that has little dissection and dotted by numerous small playas<sup>1</sup>. Local topography is characterized by a linear plain.

According to the Geologic Map of New Mexico<sup>2</sup>, the area is underlain by the Pliocene-age Ogallala Formation, which consists of fluvial sand, silt, clay, and gravel capped by caliche. Maximum thickness of the Ogallala is up to 100 feet. The Kimbrough-Lea association soil at the Site is well drained, calcareous, gravelly loam. <sup>3</sup> Typically, the surface layer is dark grayish brown gravelly loam over indurated caliche.

Depth to water in the vicinity of the Site is estimated to be approximately 50 feet below ground surface (fbgs). This interpretation is based information gathered at another ConocoPhillips remediation project entitled "East Vacuum Playa," located approximately 1 mile southwest of the Site. A fresh water pond is located approximately 800 feet northeast of the Site. ConocoPhillips operates a CO2 injection plant approximately 1.5 miles southwest of the Site and wells supply domestic water to the plant. There are dry playas in the area that briefly hold rain water following a storm event; the nearest being approximately 260 feet away.

<sup>&</sup>lt;sup>1</sup> Turner, M.T., D.N. Cox, B.C Mickelson, A.J. Roath, and C.D Wilson, 1973. Soil Survey Lea County, New Mexico. U.S. Department of Agriculture Soil Conservation Service, 89p.

New Mexico Bureau of Geology and Mineral Resources, 2003. Geologic Map of New Mexico, 1:500,000.
 U.S. Department of Agriculture, Natural Resources Conservation Services. Web Soil Survey Database.

Following the ranking criteria presented in "Guidelines for Remediation of Leaks, Spills, and Releases" promulgated on August 13, 1993 by the NMOCD, this Site has the following score:

<u>Criteria</u>	•	Ranking <u>Score</u>
Depth to groundwater	<50 feet	20
Distance from water source	>1000 feet	0
Distance from domestic water source	>200 feet	0
Distance from surface water body	>200 feet	<u>0</u>
Total Ranking Score		20

The remediation action level for a ranking score of >19 is 10 parts per million (ppm) for benzene, 50 ppm for total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 100 ppm for total petroleum hydrocarbons (TPH).

## Scope of Work

The lateral extent of the release area is defined by soil discoloration. To delineate the vertical extent of the crude oil affected area, Tetra Tech will perform the following activities:

- 1. A backhoe will be used dig exploratory trenches in the affected area.
- 1. It is anticipated that 2 trenches will be excavated inside the affected area and soil samples will be collected every two feet in each trench. Soil samples collected from the trenches will be field tested using a photo-ionization detector (PID) to screen for volatile organic compounds (VOC). Diesel range petroleum hydrocarbons (TPH <sub>DRO</sub>) will be field screened using a PetroFLAG System.<sup>4</sup> VOC and TPH<sub>DRO</sub> field analysis will determine the clean boundary of < 50 parts per million (ppm) VOC and < 5,000 ppm TPH. Field chloride titration will be used to determine the clean boundary for chloride (<250 parts per million chloride).</p>
- 2. Two soil samples from each soil trench (highest TPH DRO reading/chloride concentration and basal sample, 6 possible) will be submitted to a laboratory for confirmation analyses. The samples will be placed into glass sample jars, sealed with Teflon-lined lids, and placed on ice for transportation to an analytical laboratory where they will be analyzed for total petroleum hydrocarbons (TPHDRO and TPHGRO, Method 8015) and benzene, toluene, ethylbenzene, and total xylenes (BTEX, Method 8260), and chloride (Method 300.0). In addition, the basal samples from each soil trench will be analyzed for BTEX and chloride synthetic precipitation leaching potential (SPLPBTEX; USEPA Method 1312/8015 and SPLPCI USEPA Method 1312/300.0). These analyses will be used to confirm clean vertical boundaries have been identified.
- 3. Excavated soil will be returned to the trench for handling during site remediation.

<sup>&</sup>lt;sup>4</sup> U.S. Environmental Protection Agency, 2001. Innovative Technology Verification Report, Dexsil Corporation PetroFLAG<sup>TM</sup> System. Prepared by Tetra Tech EM Inc. for USEPA National Exposure Research Laboratory Office of Research and Development. EPA/R-01/092.



4. Tetra Tech will supervise and direct all subcontractor activities, and prepare a report describing and documenting what was done at the Site, including a site map and recommendations for remediation.

Tetra Tech will conduct all activities, and prepare a findings report describing and documenting what was done at the Site, including a site map. This report on activities, results, and recommendations will be submitted for ConocoPhillips and New Mexico Oil Conservation Division's review and approval.

## **Project Schedule**

Tetra Tech has been authorized by ConocoPhillips to commence work on this project immediately following receipt of your notification to proceed.

If you concur with this work plan, please notify me of your approval at your earliest convenience. Please contact me or Mr. Mickey Garner (ConocoPhillips, 505-391-3158), if you have any questions or require additional information.

Sincerely,

### Tetra Tech, Inc.

Digitally signed by Charles Durrett
DN CN = Charles Durrett, C = US, O = Tetra Tech
Date 2008 03 26 14 55 09 -0500'

Charles Durrett Office Manager

CC: Mr. Mickey Garner, ConocoPhillips Company

