



**CONESTOGA-ROVERS
& ASSOCIATES**

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November 2, 2006

Reference No. 046190

Mr. Chris Williams
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240

Re: Drilling/Recovery Well Scope of Work Plan
BP Pipelines (North America) Inc.
Maljamar 6-inch Line Crude Oil Release - North of Highway 529
SW/4 of NE/4 (Unit Letter G) of Section 31, Township 17 South, Range 33 East
Lea County, New Mexico

WTR (20')

Dear Mr. Williams:

Conestoga-Rovers and Associates (CRA) is pleased to present this Drilling/Recovery Well Work Plan on behalf of BP Pipelines (North America), Inc. (BP) for the above referenced crude oil release site. This Plan is being implemented for additional crude oil delineation and recovery and is supplemental to the previously New Mexico Oil Conservation Division (NMOCD) approved remediation plan for this Site.

PROJECT INFORMATION

The subject release site is located approximately 0.5-miles north of Highway 529 and 5-miles southeast of Maljamar, Lea County, New Mexico (FIGURE 1). The legal description of the Site is the SW/4 of the NE/4, Section 31, T-17-S, R-33-E with GPS coordinates 32° 47.677' N and 103° 41.818' W. CRA understands the surface property is owned by the R. Caviness Trust.

The crude oil release was reported on the New Mexico Oil Conservation Division Form C-14-1, Release Notification and Corrective Action, as >25-barrels and discovered on July 10, 2006. The release was the result of internal corrosion inside the 6-inch gathering line. The line was temporarily repaired with a patch and clamped. CRA understands that the line was installed in 1989 at 6-feet deep and handles approximately 800-barrels per day at a working pressure of 300-psi. BP reported that the crude oil has an average API specific gravity of 39.0 and approximately 20-ppm hydrogen sulfide.

REGULATORY FRAMEWORK

The OCD has regulatory jurisdiction over oil and gas production operations including pipeline spill/closure in the State of New Mexico. This project will be conducted under the regulatory jurisdiction of the OCD, which requires that soil impacted by a crude oil spill be remediated in such a manner that the potential for future affects to groundwater or the environment are minimized. The OCD hydrocarbon remediation levels are determined by ranking criteria on a site-by-site basis, which is outlined in the OCD *Guidelines for Remediation of Spills, Leaks, and Releases*, dated August 13, 1993. The ranking criteria are

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RP# 956

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based on three site characteristics: depth to groundwater, wellhead protection and distance to surface water.

Information obtained by CRA from the New Mexico Office of the State Engineer on July 10, 2006 indicated that the depth-to-groundwater in the vicinity of the Site is interpreted to be greater than 100-feet. A copy of a water well record for a location in section 20, T-17-S; R-33-E demonstrated a depth to water of 190 feet. Based on these Site characteristics and associated OCD ranking criteria presented in the table below, the following hydrocarbon remediation levels apply at the Site: benzene- 10 ppm, Total BTEX- 50 ppm and TPH- 5,000 ppm.

CHARACTERISTIC	SELECTION	SCORE
Depth to Groundwater	> 100 feet	0
Wellhead Protection Area	>1,000 feet	0
Distance to Surface Water	>1,000 feet	0

Total Ranking Score = 0

PROPOSED ACTIVITIES

CRA proposes to install five borings at the release site in an attempt to locate and recover additional released crude oil. Due to budget constraints, three of the proposed borings are to be converted to recovery wells as appropriate for recovery of the crude oil. This activity is scheduled to begin on Monday November 6, 2006. Prior to mobilizing the drilling equipment to the Site, the boring location areas will be marked. Also, the utility notification was made on Thursday November 2, 2006. The New Mexico Oil Conservation Division (NMOCD) also will be notified with at least 48 hours notice. A post-hole digger or similar tool will be utilized to clear each boring location to a depth of approximately 5-feet below ground surface (bgs) and approximately 10-inches in diameter.

An air-rotary rig, operated by White Drilling of Clyde, Texas (State of New Mexico licensed water well driller), will be utilized to advance the proposed borings to appropriate depths (estimated at approximately 50-feet bgs) to assess the nature and extent of hydrocarbon impacted soils at the release site. Soil samples will be field screened with a photo-ionization detector (PID) or organic vapor meter (OVM) to measure the relative concentration of volatile organic compounds (VOCs) of the samples using the "heated headspace method." Soil samples collected for laboratory analysis will be based on physical observations and field VOC measurements. The soil sampling plan will generally include the collection of soil samples in five-foot intervals when the PID meter detection is above 100 ppm. In wells that have PID meter detection levels below 100 ppm three samples will be taken, one at the depth of the highest PID meter reading, one at the bottom of the well bore and one sample 1' above crude oil or water. A geologist will record the subsurface lithology and sample data on soil boring logs. Selected soil samples from each boring will be analyzed for total petroleum hydrocarbons by (TPH) diesel-range organics



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(DRO) and gasoline-range organics (GRO) by EPA Method 8015 modified and analysis of benzene, toluene, ethyl benzene and xylene (BTEX) by EPA Method 8021B.

If you have any questions or comments with regards to this Drilling/Recovery Well Scope of Work Plan please call do not hesitate to contact our Midland office at (432) 686-0086.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Todd Wells
Project Manager

Thomas C. Larson
Operations Manager

Enclosures: Drilling/Recovery Well Installation Cost Estimate

c.c.: Jimmy Humble, BP Pipelines (North America) Inc., Lovington, New Mexico
Jim Lutter, BP Pipelines (North America) Inc., Levelland, Texas
CRA - Midland File

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FACSIMILE

DATE: 11/2/06
TO: Chris Williams (NMOC D)
Larry Johnson
FROM: Todd Wells

REFERENCE NO.: 045190
FACSIMILE NO.: (505) 393-0720

Total Pages (Including Cover Page) 4☐ Facsimile is Receiver's Original

Original Will Follow By:

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MESSAGE

This facsimile is notify the NMOC D in advance of drilling activities scheduled to begin on Monday November 6, 2006. Please call if there are any questions.

Regards,

Todd Wells

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