NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

7/25/2006

Conestoga-Rovers & Associates
2135 S. Loop 250 West
Midland, TX 79705
Attn: Thomas Larson

Reference No. 046190

Dear Mr. Larson:

The remediation plan submitted fro the 6- inch product line at ULG-Sec 31- T17S – 33E is **hereby approved**. Please note that the New Mexico Oil Conservation Division Hobbs District office needs to be notified 48 hours in advance before sampling events occur.

Sincerely

Chris Williams
NMOCD District1 Supervisor

RP #956
application - pPAC0619930768
(BP Maljamar Gathering Line)

CONESTOGA-ROVERS
& ASSOCIATES

2135 S. Loop 250West
Midland, Texas 79705
Telephone: (432) 686-0086 Fax: (432) 686-0186
http://www.craworld.com

July 24, 2006

Reference No. 046190

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

Re: Soil Remediation Workplan
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

I am forwarding the attached BP Maljamar Workplan to you as a matter of record. The workplan was submitted electronically to Paul Sheely on July 18, 2006 as well as to Larry Johnson on July 21.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Thomas C. Larson
Operations Manager

JUL 2006
Received
Hobbs
OCD

Approved
CW
7/28/06

Equal
Employment Opportunity
Employer

CONESTOGA-ROVERS
& ASSOCIATES

2135 S. Loop 250West
Midland, Texas 79705
Telephone: (432) 686-0086 Fax: (432) 686-0186
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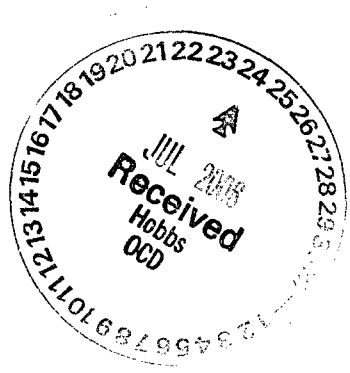
July 17, 2006

Reference No. 046190



Mr. Chris Williams
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1625 N. French Drive
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Re: Soil Remediation Workplan
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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

Dear Mr. Williams:

Conestoga-Rovers and Associates (CRA) is pleased to present this Soil Remediation Workplan on behalf of BP Pipelines (North America), Inc. (BP) for the above referenced crude oil release 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.

> refer to C-141 spill report submitted by BP. CRA

The crude oil release estimated at <25-barrels was 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 39.0 API specific gravity and approximately 20-ppm hydrogen sulfide. A copy of the submitted OCD form C-141, Release Notification and Corrective Action is included as an enclosure to this correspondence.

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

Information obtained by CRA form the New Mexico Office of the State Engineer on January 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 (attached) 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 an estimated six to eight borings at the release site to evaluate the horizontal and vertical extent of hydrocarbon impacted soils. This activity is scheduled to occur beginning on July 19, 2006. Prior to mobilizing the drilling equipment to the Site, the boring location areas will be marked and a utility notification will be made at least 48-hour prior to mobilization. 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 10-feet to 50-feet bgs) to assess the nature and extent of hydrocarbon impacted soils at the release site. The soil sampling plan will generally include the collection of soil samples in five-foot intervals. 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. 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 (DRO) and gasoline-range organics (GRO) by EPA Method 8015 modified and analysis of benzene, toluene, ethylbenzene and xylene (BTEX) by EPA Method 8021B.

If hydrocarbon-impacted soils extend to groundwater, temporary and/or permanent groundwater monitoring wells will be installed to evaluate the magnitude and extent of groundwater impacts. General well specifications include: four-inch diameter PVC casing/screens with gravel-packed screened intervals to straddle the soil/groundwater interface, bentonite seals above the gravel pack, and above ground

surface completions with concrete pads. Any temporary wells would not include any well construction material above the bentonite seal or surface completions and concrete pads. The drill cuttings will be stockpiled along pipeline right-of-way above the (obvious) release area for management associated with planned soil remediation activities anticipated at this location. The wells will be developed by bailing, and top of casing elevations will be surveyed to the nearest 0.01 foot. Well development and purge water will be containerized in properly labeled, 55 gallon, steel, DOT approved drums and waste characterization analysis performed for management purposes.

Groundwater sampling activities will be conducted at least 24-hours after the wells have been developed. Utilizing an interface probe, static water levels and product thickness will be measured to the nearest hundredth of a foot. Upon obtaining static water level and product measurements, each well not containing light, non-aqueous, phase liquids (LNAPL) will be purged by bailing approximately three wetted well casings or until the wellbore is dry. Once geochemistry parameters have stabilized groundwater samples will be obtained from all monitoring wells using disposable tubing. Groundwater samples will be delivered to the laboratory for determination of TPH concentrations using diesel-range organics (DRO) and gasoline-range organics (GRO) by EPA Method 8015 modified and Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) using EPA Method 8021.

The soil assessment information will subsequently be evaluated to develop an excavation approach to remove hydrocarbon-affected soils from the release area that exhibit concentrations above regulatory levels.

Hydrocarbon-impacted soils associated with the crude oil release will be excavated by BP designated subcontractors and delineated using appropriate heavy equipment. The vertical and horizontal extents of the excavation will be assessed by field personnel using OCD procedures for headspace analysis of soil samples. Confirmation soil samples will be collected for determination of the final soil contaminant concentrations pursuant to section VI.A of the OCD *Guidelines for Remediation of Spills, Leaks, and Releases,* dated August 13, 1993.

Soil samples collected from the remedial excavation at the site will placed into a laboratory-supplied soil jars equipped with a Teflon-lined lid and placed on ice in an insulated cooler. These samples will be submitted to TraceAnalysis, Inc. (Trace) in Lubbock, Texas for analysis of total petroleum hydrocarbons (TPH) diesel-range organics (DRO) and gasoline-range organics (GRO) by EPA Method 8015 modified and analysis of benzene, toluene, ethylbenzene and xylene (BTEX) by EPA Method 8021B. The submitted coolers will be sealed for shipment and proper chain-of-custody documentation will accompany the samples to the laboratory.

Soils exhibiting concentrations above hydrocarbon remediation levels will be brought to the ground surface (to the practical extent possible) and staged onsite. Pending authorization from the surface property owner, the soils will be blended with onsite soils and amendments to the soils may be added in efforts to reduce the hydrocarbon concentrations in the soils. Soils will then be analyzed to determine concentrations relative to the hydrocarbon remediation levels. Soils exhibiting concentrations below

regulatory levels (TPH – 5,000 ppm; Total BTEX – 50 ppm and benzene 10 ppm) will be placed back into the remedial excavation. Alternative waste management options will be considered as appropriate.

Please note that BP is currently active in the remedial actions associated with this location. If you have any questions or comments with regards to this Soil Remediation Workplan please call do not hesitate to contact our Midland office at (432) 686-0086. Your timely response to this correspondence is appreciated.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Edward D. (Ted) Philley
Project Geologist

Thomas C. Larson
Operations Manager

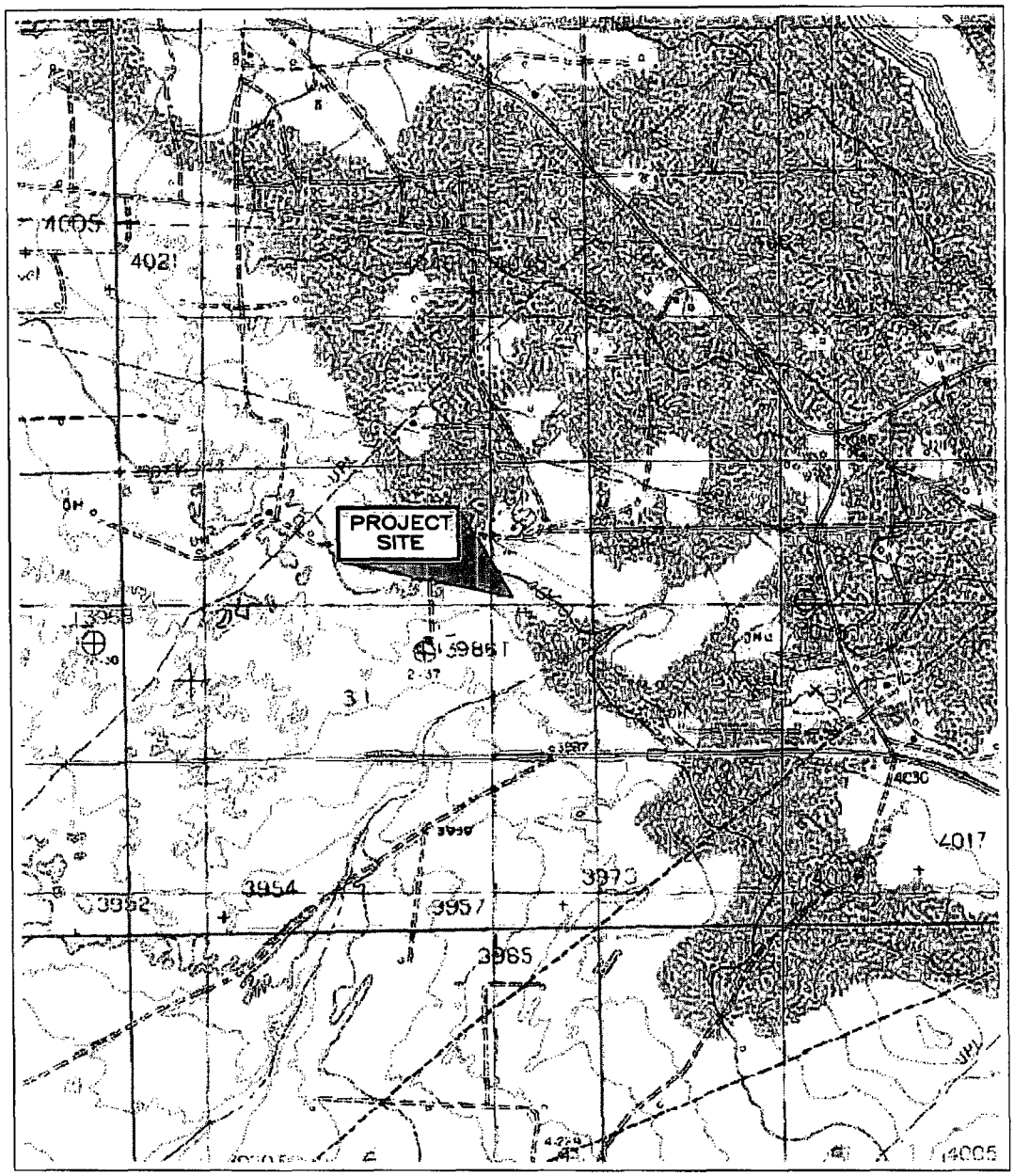
Enclosures:
Site Location Map
Form C-141
Water Well Record

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

DOG LAKE QUADRANGLE
NEW MEXICO

LAT=32° 47.677' N
LONG=103° 41.818' W

PHOTOREVISED 1985



USGS MAP SERIES 1:24000

0 1/2 1 2
(Miles)

0 2000 4000 6000 8000
(Feet)

CONTOUR INTERVAL 10 FEET

NORTH

046190 SLR 071406

SITE LOCATION MAP	JOB No. 046190
BP PIPELINE (NORTH AMERICA) INC. MALJAMAR 6-INCH NORTH CRUDE OIL RELEASE SITE NORTH OF HIGHWAY 529 LEA COUNTY, NEW MEXICO	FIGURE 1

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 BP Pipelines (NA) Inc	Contact Jimmy Humble
Address 502 N. West Ave. Levelland, Texas	Telephone No. 505-396-9922
Facility Name Maljamar Gathering Pipeline	Facility Type Pipeline

Surface Owner ROSS CAVINESS	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	R33E	Feet from the	North/South Line	Feet from the	East/West Line	County LEA
	31	T17S						

Latitude N 32 47.677 **Longitude** W 103 41.818

NATURE OF RELEASE

Type of Release : Crude Oil Spill	Volume of Release: >25 bbl	Volume Recovered 0
Source of Release: Pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery 7-10-06 13:10 Hours
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? PAT Telephone 393-6161	
By Whom? Jimmy Humble	Date and Hour 7/11/06 10:30 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Corrosion caused pipe to fail resulting in spill.

Describe Area Affected and Cleanup Action Taken.*

Surface area is approximately 15' X 30' Depth is being determined. Soils will be Remediation is being undertaken by environmental consultant.

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: Jimmy Humble	Approved by District Supervisor:	
Title: Lovington Core Team Leader	Approval Date:	Expiration Date:
E-mail Address: Jimmy.Humble@bp.com	Conditions of Approval:	Attached ☐
Date: 7/12/06 Phone: 505-396-9922		

* Attach Additional Sheets If Necessary

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 02875 APPRO	17S	33E	20	2	2				

Driller Licence: 46 ABBOTT BROTHERS COMPANY
Driller Name:
Source: Shallow
Drill Start Date: 05/18/1955
Drill Finish Date: 05/20/1955
Log File Date: 05/26/1955
PCW Received Date:
Pump Type:
Pipe Discharge Size:
Casing Size:
Estimated Yield:
Depth Well: 250
Depth Water: 190

New Mexico Office of the State Engineer

Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03713	17S	33E	28	1	4	3			

Driller Licence: 46 ABBOTT BROTHERS COMPANY
Driller Name: ABBOTT, MURRELL
Source: Shallow
Drill Start Date: 10/21/1957
Drill Finish Date: 10/23/1957
Log File Date: 12/30/1957
PCW Received Date:
Pump Type: TURBIN
Pipe Discharge Size:
Casing Size:
Estimated Yield:
Depth Well: 210
Depth Water: