



**CONESTOGA-ROVERS
& ASSOCIATES**

2135 S. Loop 250 West

Midland, Texas 79705

Telephone: (432) 686-0086

Fax: (432) 686-0186

<http://www.craworld.com>

January 12, 2006

Reference No. 043918-02

Mr. Paul Sheeley
Environmental Engineer
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Remediation Workplan
BP Pipelines (North America) Inc.
Maljamar 6-inch Line Crude Oil Release Site #2
SW/4 of Section 20, Township 17 South, Range 33 East
Lea County, New Mexico

Dear Mr. Sheeley:

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.

The Maljamar 6-inch Line #2 release site is located 1.7-miles north of Highway 529 on County Road 125 approximately 5-miles southeast of Maljamar, Lea County, New Mexico (FIGURE 1). The legal description of the Site is the SW/4 of Section 20, T-17-S, R-33-E with GPS coordinates 32° 48:825' N and 103° 41:545' W. CRA understands the surface property is owned by the State of New Mexico.

A crude oil release of approximately 10-barrels occurred on December 22, 2005. The release was the result of internal corrosion inside the 6-inch gathering line. The line was clamped and subsequently repaired by replacing a section of the line with new pipe. CRA understands that the line was installed in 1989 at 6-feet deep and handles approximately 150-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.

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.

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BP-209700

Application - PPAC0603152567

Worldwide Engineering, Environmental, Construction, and IT Services



**CONESTOGA-ROVERS
& ASSOCIATES**

January 12, 2006

2

Reference No. 043918-02

Information obtained by CRA from 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 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

Hydrocarbon-impacted soils associated with the crude oil release will be excavated by BP designated subcontractors and delineated using a trackhoe. 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 at the site will be placed into a laboratory-supplied soil jar 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.



**CONESTOGA-ROVERS
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January 12, 2006

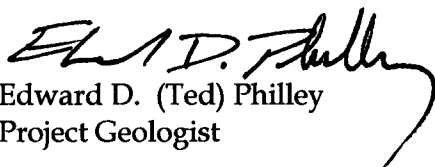
3


Reference No. 043918-02

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
CRA - Midland File

1-24-06 @ ~ 3:00
Line must be pressurized
and/or replaced per Paul S.
phone call to Jimmy Humble



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

February 3, 2006

Jimmy Humble
BP Pipelines N. A., Inc. (BP)
302 East Ave. A
Lovington, NM 88260

Re: Remediation Work Plan Approval w/conditions
Maljamar 6-inch Line Crude Oil Release Sites #1, and #2
location: UL- Sec. 20 and 29 – T17E-R33E

Dear Mr. Humble,

The New Mexico Oil Conservation Division (OCD) reviewed the plan submitted by Conestoga-Rovers & Associates (Conestoga), for BP, and referenced above. The plan is **herby approved** according to the information provided with the following conditions:

1. BP shall provide notification by email to paul.sheeley@state.nm.us and Larry.Johnson@state.nm.us a minimum 48-hours in advance of any sampling, backfilling and/or construction activities. Notification(s) shall be documented in the closure plan with the event, time, date and OCD representatives name.
2. BP shall vertically and horizontally delineate the vadose zone at each location according to OCD guidelines, ("Guidelines for Remediation of Leaks, Spills and Releases"):
3. BP shall submit a plan, by April 28, 2006, for repair and/or replacement of this line to prevent future releases.

Please be advised that OCD approval of this plan does not relieve BP of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve BP of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Sincerely,

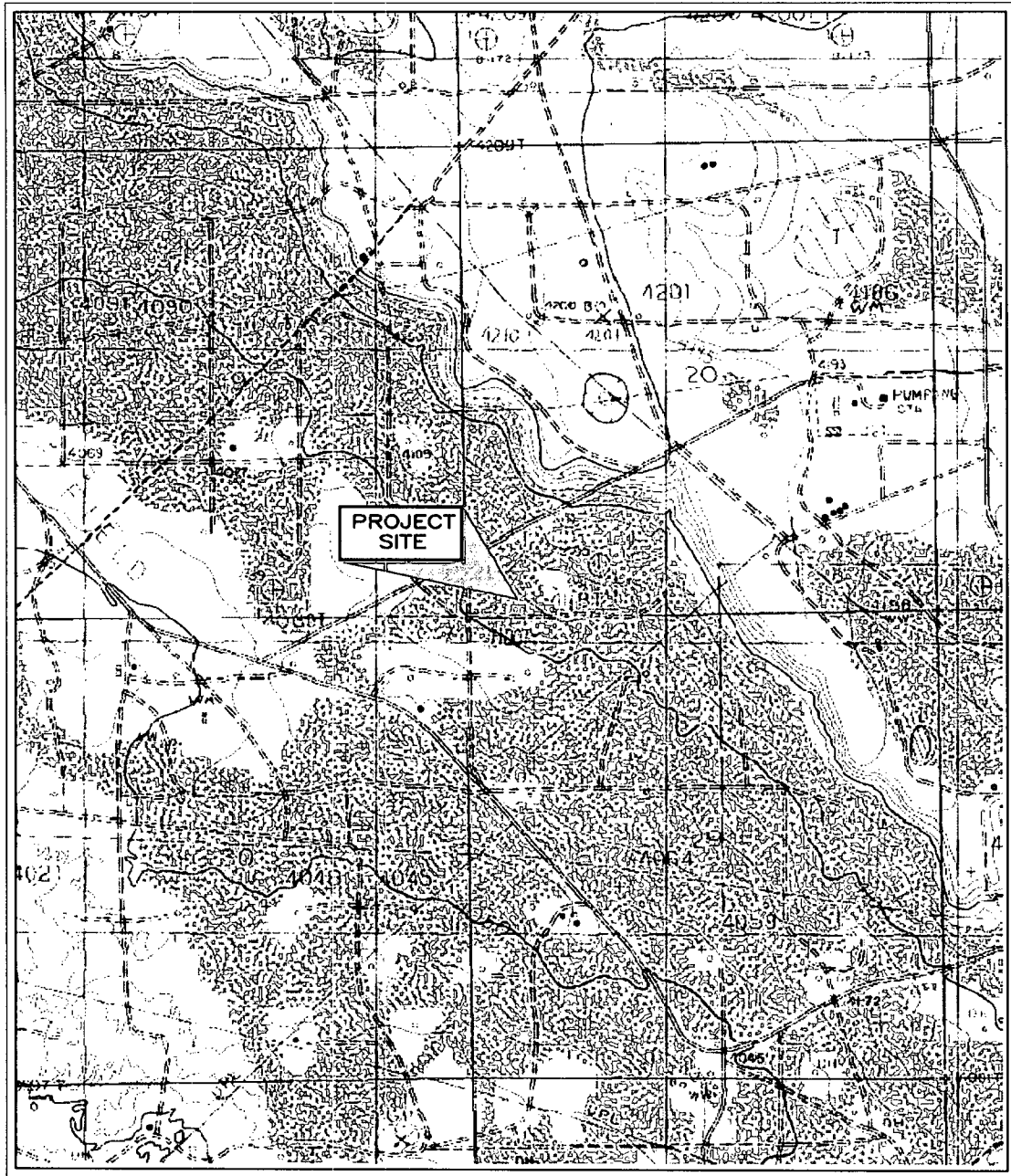
Paul Sheeley-Environmental Engineer District 1, paul.sheeley@state.nm.us

Cc: Larry Johnson - Environmental Engineer, Dist. 1
Chris Williams - District 1 Supervisor.
Thomas Larson - Conestoga

DOG LAKE QUADRANGLE
NEW MEXICO

LAT=32° 48.825' N
LONG=103° 41.545 W

PHOTOREVISED 1985



USGS MAP SERIES 1:24000



(Miles)

(Feet)

CONTOUR INTERVAL 10 FEET



NORTH

043918 SLR 011206



SITE LOCATION MAP

BP PIPELINE (NORTH AMERICA) INC.
MALJAMAR 6-INCH CRUDE OIL RELEASE SITE #2 LEA COUNTY, NM

JOB No.
043918-02

FIGURE
1

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	17S	33E	20	2	2				

Driller Licence: 46 ABBOTT BROTHERS COMPANY

Driller Name: MURRELL ABBOTT

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: 7

Estimated Yield:

Depth Well: 250

Depth Water: 190

Water Bearing Stratifications:	Top	Bottom	Description
	190	235	Shallow Alluvium/Basin Fil
Casing Perforations:	Top	Bottom	
	190	250	

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)

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L 02875 APPRO	17S	33E	20	2	2				

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Driller Name:

Source: Shallow

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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	Tw	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:



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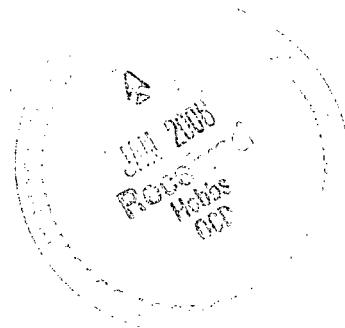
<http://www.craworld.com>

January 12, 2006

Reference No. 043918-01

Mr. Paul Sheeley
Environmental Engineer
New Mexico Oil Conservation Division
1625 N. French Drive
Hobbs, New Mexico 88240

Re: Soil Remediation Workplan
BP Pipelines (North America) Inc.
Maljamar 6-inch Line Crude Oil Release Site #1
NW/4 of Section 29, Township 17 South, Range 33 East
Lea County, New Mexico



Dear Mr. Sheeley:

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.

The Maljamar 6-inch Line release site #1 is located 1.5-miles north of Highway 529 on County Road 125 approximately 5-miles southeast of Maljamar, Lea County, New Mexico (FIGURE 1). The legal description of the Site is the NW/4 of Section 29, T-17-S, R-33-E with GPS coordinates 32° 48.674' N and 103° 41.585' W. CRA understands the surface property is owned by the R. Caviness Trust.

A crude oil release of approximately 35-barrels occurred on December 22, 2005. The release was the result of internal corrosion inside the 6-inch gathering line. The line was clamped and a reported 10-barrels of crude oil was recovered using a vacuum truck. Subsequently, the line was repaired by replacing a section of the line with new pipe. CRA understands that the line was installed in 1989 at 6-feet deep and handles approximately 150-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.

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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January 12, 2006

2

Reference No. 043918- 01

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 January 10, 2006 indicated that the depth-to- groundwater in the vicinity of the Site is 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

Hydrocarbon-impacted soils associated with the crude oil release will be excavated by BP designated subcontractors and delineated using a trackhoe. 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.

Each soil sample collected at the site will placed into a laboratory-supplied soil jar equipped with a Teflon-lined lid and placed on ice in an insulated cooler. These samples will be submitted 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.



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January 12, 2006

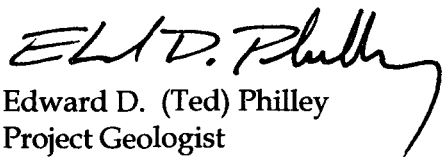
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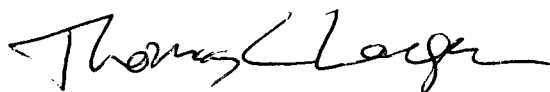
Reference No. 043918- 01

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

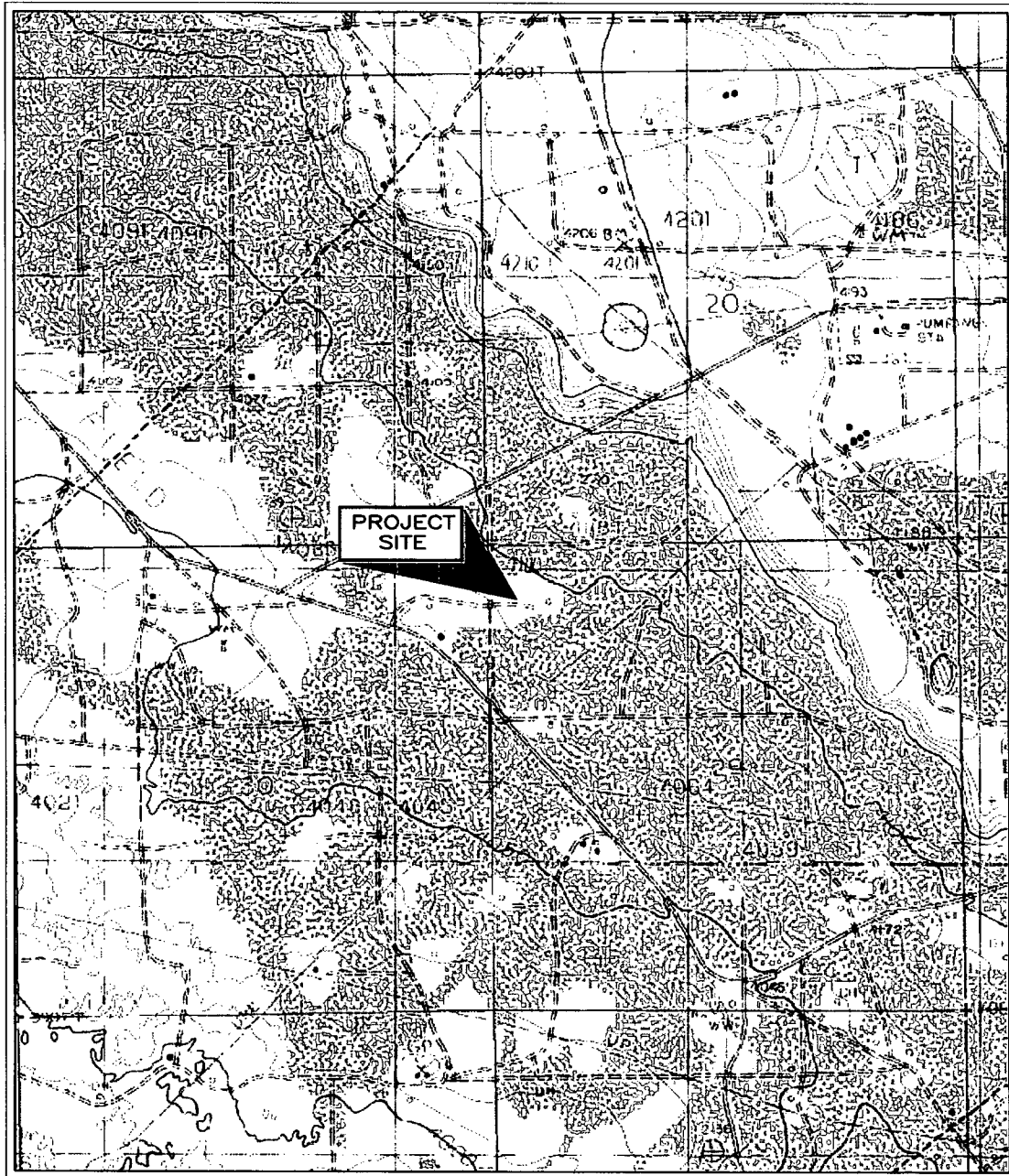
c.c.: Jimmy Humble, BP Pipelines (North America) Inc., Lovington, New Mexico
CRA - Midland File

1-24-06 15:00
Line must be pressure tested and/
or replaced. -Paul S. phone call
to Jimmy Humble - he agreed

DOG LAKE QUADRANGLE
NEW MEXICO

LAT=32° 48.674' N
LONG=103° 41.585 W

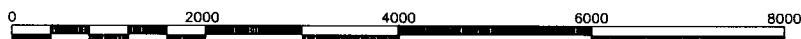
PHOTOREVISED 1985



USGS MAP SERIES 1:24000



(Miles)



(Feet)

CONTOUR INTERVAL 10 FEET



NORTH

043918 SLR 011206



SITE LOCATION MAP

BP PIPELINE (NORTH AMERICA) INC.
MALJAMAR 6-INCH CRUDE OIL RELEASE SITE #1 LEA COUNTY, NM

JOB No.
043918-01

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 N.A., INC	Contact JIMMY HUMBLE
Address 302 EAST AVE. A LOVINGTON, NM 88260	Telephone No. (505) 396-2817
Facility Name MALJAMAR 6" LINE #1	Facility Type GATHERING PIPELINE
Surface Owner STATE OF NEW MEXICO	Mineral Owner UNKNOWN
Lease No. UNKNOWN	

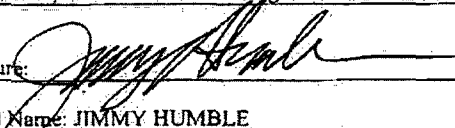
LOCATION OF RELEASE

Unit Letter	Section 29	Township 17S	Range 33E	Feet from the	North/South Line 500	Feet from the	East/West Line 600	County LEA
-------------	---------------	-----------------	--------------	---------------	-------------------------	---------------	-----------------------	------------

Latitude N32° 48.674

Longitude 103° 41.585

NATURE OF RELEASE

Type of Release CRUDE OIL	Volume of Release 35 BARRELS	Volume Recovered 10 BARRELS
Source of Release PIPELINE	Date and Hour of Occurrence UNKNOWN	Date and Hour of Discovery 12/22/05 2:30PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
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.* THE OCCURRED DUE TO INTERNAL CORROSION IN THE PIPE. ALL CONTAMINATED SOIL WILL BE BROUGHT TO THE SURFACE AND A REMEDIATION PLAN WILL BE DEVELOPED		
Describe Area Affected and Cleanup Action Taken.* 20 FEET BY 40 FEET PIPE WAS EXCAVATED AND LEAK CLAMPED OFF. THE PIPE IS TO BE REPLACED 12/27/05. ALL FREE OIL WAS PICKED UP AND ALL CONTAMINATED SOIL WILL BE BROUGHT TO THE SURFACE FOR REMEDIATION DISPOSAL.		
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: TEAM LEADER	Approval Date:	Expiration Date:
E-mail Address: humbleja@bp.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12/27/05	Phone: (505) 396-2817	

* 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	17S	33E	20	2	2				

Driller Licence: 46 ABBOTT BROTHERS COMPANY

Driller Name: MURRELL ABBOTT

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: 7

Estimated Yield:

Depth Well: 250

Depth Water: 190

Water Bearing Stratifications:	Top	Bottom	Description
	190	235	Shallow Alluvium/Basin Fil
Casing Perforations:	Top	Bottom	
	190	250	

New Mexico Office of the State Engineer
Point of Diversion Summary

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Casing Size:

Estimated Yield:

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New Mexico Office of the State Engineer
Point of Diversion Summary

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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: