

AP - 35

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2001 - 2004



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

December 3, 2004

Mr. Bob Allen  
Safety & Environmental Solutions, Inc.  
P.O. Box 1613  
Hobbs, NM 88240

Dear Bob:

This is in reference to your letter, dated November 23, 2004, requesting an extension of time to perform certain tasks related to abatement plans AP-34 and AP-35 for Navajo Refining Co.

This request is hereby approved. Please have the tasks completed by December 15, 2004. If you have any questions, contact me at 505-476-3492 or [emartin@state.nm.us](mailto:emartin@state.nm.us)

NEW MEXICO OIL CONSERVATION DIVISION

Edwin E. Martin  
Environmental Bureau



P.O. Box 1813  
703 E. Clinton Suite 102  
Hobbs, New Mexico 88240  
505/397-0510  
Fax 505/393-4388  
www.sesi-nm.com

## **Safety & Environmental Solutions, Inc.**

November 23, 2004

Mr. Ed Martin  
New Mexico Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Dear Ed:

This letter is to request an extension of time to complete the requirements listed in the letters dated October 6, 2004, concerning Navajo Refining Company's Abatement Plans AP-34 and AP-35. An extension to December 15, 2004 would be greatly appreciated.

Thank you for your consideration in this matter.

Sincerely,

Bob Allen ASP, CHMM, REM, CET, CES  
President

BA/jra

GOVERNOR  
Bill Richardson



STATE OF NEW MEXICO  
DEPARTMENT OF GAME & FISH

One Wildlife Way  
Post Office Box 25112  
Santa Fe, NM 87504  
Phone: (505) 476-8008  
Fax: (505) 476-8124

STATE GAME COMMISSION  
Guy Riordan, Chairman  
Albuquerque, NM

Alfredo Montoya, Vice-Chairman  
Alcalde, NM

David Henderson  
Santa Fe, NM

Jennifer Atchley Montoya  
Las Cruces, NM

Peter Pino  
Zia Pueblo, NM

Dr. Tom Arvas  
Albuquerque, NM

Leo Sims  
Hobbs, NM

DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Bruce C. Thompson

Visit our website at [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us)  
For basic information or to order free publications: 1-800-862-9310.

December 1, 2004

Director, Oil Conservation Division  
1220 St. Francis Drive  
Santa Fe NM 87505

AP-35

Re: Stage 1 Abatement Plan, Navajo Refining Company Hobbs North GSA 6" gathering line  
NMGF No. 9701

Dear OCD Director:

In response to your letter dated November 3, 2004, regarding the above referenced project, a list of species of concern that occur in Lea County has been enclosed. Based on the information provided, the Department of Game and Fish cannot assess the impact of your project on wildlife and is not able to conduct site specific searches. Other sources of information are:

1. Species Accounts: <http://fwie.fw.vt.edu/states/nm.htm>
2. Species Searches: <http://nmmhp.unm.edu/bisonm/bisonquery.php>
3. New Mexico Wildlife of Concern by Counties List:  
[http://www.wildlife.state.nm.us/conservation/share\\_with\\_wildlife/documents/speciesofconcern.pdf](http://www.wildlife.state.nm.us/conservation/share_with_wildlife/documents/speciesofconcern.pdf)
4. Habitat Handbook Project Guidelines:  
[http://wildlife.state.nm.us/conservation/habitat\\_handbook/index.htm](http://wildlife.state.nm.us/conservation/habitat_handbook/index.htm)
5. For custom, site-specific database searches on plants and wildlife. Go to Data then to Free On-Line Data and follow the directions go to: <http://nmmhp.unm.edu>
6. New Mexico State Forestry Division (505-827-5830) or <http://nmrareplants.unm.edu/index.html> for state-listed plants
7. For the most current listing of federally listed species **always** check the U.S. Fish and Wildlife Service at (505-346-2525) or <http://ifw2es.fws.gov/EndangeredSpecies/lists/>.

Thank you for the opportunity to review and comment on your project. If you have any questions, please contact Rachel Jankowitz at (505) 476-8159 or [rjankowitz@state.nm.us](mailto:rjankowitz@state.nm.us).

Sincerely,

*Mark Watson*  
for

Jan Ward, Assistant Chief  
Conservation Services Division

LK/rjj

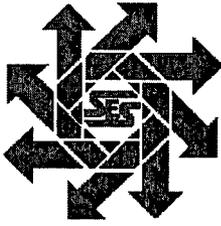
cc: Susan MacMullin, New Mexico Ecological Services, USFWS  
Roy Hayes, SE Area Operations Chief, NMGF

## New Mexico Species of Concern - Lea County

Common Name.....	SCIENTIFIC NAME.....	FWS..	NM...	FS.	BLM..	NM...	FWS.
		ESA	WCA	R3	NM	Sen	SOC
Texas Horned Lizard	Phrynosoma cornutum	-	-	s	s	-	-
Sand Dune Lizard	Sceloporus arenicolus	C	T	-	s	-	-
Desert Kingsnake	Lampropeltis getula splendida	-	-	s	-	-	-
Mississippi Kite	Ictinia mississippiensis	-	-	s	-	-	-
Bald Eagle	Haliaeetus leucocephalus	AD, T mg	T	s	-	-	-
Swainson's Hawk	Buteo swainsoni	-	-	s	-	-	-
Ferruginous Hawk	Buteo regalis	-	-	s	s	-	-
Aplomado Falcon	Falco femoralis septentrionalis	E mg	E	s	-	-	-
American Peregrine Falcon	Falco peregrinus anatum	DM m	T	s	-	-	s
Lesser Prairie-Chicken	Tympanuchus pallidicinctus	C	-	-	s	s	-
Upland Sandpiper (no data)	Bartramia longicauda	-	-	s	-	-	-
Western Snowy Plover	Charadrius alexandrinus nivosus	-	-	s	-	-	-
Mountain Plover	Charadrius montanus	PT	-	s	-	s	-
Yellow-billed Cuckoo	Coccyzus americanus occidentalis	-	-	s	-	s	s
Flammulated Owl	Otus flammeolus	-	-	s	-	-	-
Burrowing Owl	Athene cunicularia hypugaea	-	-	-	s	-	s
Belted Kingfisher	Ceryle alcyon	-	-	s	-	-	-
Loggerhead Shrike	Lanius ludovicianus	-	-	-	s	s	-
Bell's Vireo	Vireo bellii	-	T	s	-	-	s
Gray Catbird	Dumetella carolinensis ruficrissa	-	-	s	-	-	-
Sprague's Pipit	Anthus spragueii	-	-	s	-	-	-
American Redstart	Setophaga ruticilla tricolora	-	-	s	-	-	-
Baird's Sparrow	Ammodramus bairdii	-	T	s	s	-	s
McCown's Longspur	Calcarius mccownii	-	-	s	-	-	-
Cave Myotis Bat	Myotis velifer	-	-	s	s	s	s
Black-tailed Prairie Dog	Cynomys ludovicianus ludovicianus	C m	-	-	-	s	-
Swift Fox	Vulpes velox velox	-	-	s	-	s	s
Western Spotted Skunk	Spilogale gracilis	-	-	-	-	s	-
Sandhill White-tailed Deer	Odocoileus virginianus texana	-	-	-	-	s m	-

### NATIVE SPECIES APPARENTLY NO LONGER OCCURRING IN LEA COUNTY

Mexican Gray Wolf	Canis lupus baileyi	
Black-footed Ferret	Mustela nigripes	(extirpated from NM)
Merriam's Elk	Cervus elaphus merriami	(extinct)
American Bison	Bos bison	



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703 E. Clinton Suite 102  
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www.sesi-nm.com

## **Safety & Environmental Solutions, Inc.**

November 23, 2004

Mr. Ed Martin  
New Mexico Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Dear Ed:

This letter is to request an extension of time to complete the requirements listed in the letters dated October 6, 2004, concerning Navajo Refining Company's Abatement Plans AP-34 and AP-35. An extension to December 15, 2004 would be greatly appreciated.

Thank you for your consideration in this matter.

Sincerely,

Bob Allen ASP, CHMM, REM, CET, CES  
President

BA/jra

*Approved*  
*[Signature]*



# REFINING COMPANY, L.P.

FAX  
(505) 746-5283 DIV. ORDERS  
(505) 746-5481 TRUCKING  
(505) 746-5458 PERSONNEL

501 EAST MAIN STREET • P. O. BOX 159  
ARTESIA, NEW MEXICO 88211-0159  
TELEPHONE (505) 748-3311

FAX  
(505) 746-5419 ACCOUNTING  
(505) 746-5451 EXEC/MKTG  
(505) 746-5421 ENGINEERING  
(505) 746-5480 PIPELINE

April 2, 2004

RECEIVED

APR 07 2004

OIL CONSERVATION  
DIVISION

Mr. Roger C. Anderson  
Environmental Bureau Chief  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re. Abatement Plan AP-35, Hobbs North GSA 6-Inch Gathering Line, Lea County, NM

Dear Mr. Anderson:

Attached with this letter is the Stage 1 investigation proposal required to be submitted to your office pursuant to your letter of February 4, 2004. The proposal includes information needed to complete the definition of the lateral and vertical extent of soil and groundwater contamination at the site of the North GSA pipeline release.

As you know Navajo has been conducting investigation and recovery activities in the area since discovery of the release in January 2001. In the spring of 2002 we excavated approximately 7,600 cubic yards of material from the site and transported and manifested contaminated soils to Controlled Recovery Inc. We are currently recovering hydrocarbon product at one monitor well. To date, the volume recovered has been approximately one barrel or less.

During the investigation conducted in 2002 the landowner informed us that an earlier hydrocarbon release had occurred several hundred feet north of this location. Our groundwater sampling indicates the presence of a dissolved phase hydrocarbon plume north and off gradient from the current location. Also, during groundwater sampling we discovered that the upgradient well and the other monitor wells at the site have been impacted by elevated levels of the solvent 1,2 Dichloroethane (EDC) emanating from some unknown offsite location. Navajo does not propose in the Stage 1 Abatement Plan to investigate either source of contamination.

During the time of review of this proposed Stage 1 Abatement Plan and subsequent to its anticipated approval by OCD, Navajo will continue with the existing oil recovery program. During this time, and prior to submittal and approval of a Stage 2 Abatement Plan, Navajo may desire to initiate additional actions to recover hydrocarbon and/or to prevent or minimize free or dissolved phase hydrocarbon movement from existing impacted area. If such work is proposed, Navajo will notify the OCD of the proposed activity and seek to meet and discuss the anticipated work with the OCD prior to beginning work.

Mr. Roger Anderson  
April 2, 2004

Page 2

If you have any questions on the proposed Stage 1 abatement plan, please contact me at (505) 748-3311.

Sincerely,  
NAVAJO REFINING COMPANY

A handwritten signature in black ink that reads "Darrell Moore". The signature is written in a cursive, flowing style.

Darrell Moore  
Environmental Manager for Water and Waste

cc: Jim Townsend, President, Navajo Pipeline Company  
Phil Youngblood, Director of Environmental Affairs  
David Boyer, Safety and Environmental Solutions, Inc.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**  
Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

February 4, 2004

Mr. Darrell Moore  
Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211

**RE: ABATEMENT PLAN AP-34  
NORTH MONUMENT 6 INCH GATHERING LINE  
LEA COUNTY, NEW MEXICO**

Dear Mr. Moore:

The New Mexico Oil Conservation Division (OCD) has recently reviewed the case file on Navajo Refining Company's (Navajo) soil and ground water remediation actions at the North Monument 6 Inch Gathering Line located in Unit L, Section 30, Township 19 South, Range 37 East, Lea County, New Mexico.

A review of the files shows that ground water at the site has not been remediated to New Mexico Water Quality Control Commission (WQCC) ground water standards within one year of discovery of the contamination. Therefore, the OCD requires that Navajo submit to the OCD by April 4, 2004 a Stage 1 investigation proposal to complete the definition of the lateral and vertical extent of soil and ground water contamination pursuant to OCD Rule 19.E.1. and OCD Rule 19.E.3. The investigation work conducted to date can be incorporated into the Stage 1 investigation proposal. Please submit a copy of the Stage 1 proposal to the OCD Hobbs District Office.

If you have any questions, please contact Bill Olson at (505) 476-3491.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger C. Anderson".

Roger C. Anderson  
Environmental Bureau Chief

RCA/wco

xc: Chris Williams, OCD Hobbs District Office  
Cody Morrow, NM State Land Office  
Jim Cooper

**Olson, William**

---

**From:** Johnson, Larry  
**Sent:** Monday, November 17, 2003 8:06 AM  
**To:** Olson, William  
**Subject:** FW: Lea Projects

-----Original Message-----

**From:** Darrell Moore [mailto:darrell.moore@navajo-refining.com]  
**Sent:** Wednesday, November 12, 2003 8:24 AM  
**To:** LWJohnson@state.nm.us  
**Subject:** Lea Projects

Larry,

Here is the weekly report for our projects in Lea County. If you have any questions, call me at 505-746-5281.  
Thanks

#### North Monument 6" Crude Line

Daily and weekly pumping and weekly measurements are continuing as previously reported. MaClaskey moved oil to the frac tank on Friday. Measurements of oil and water recovered will be made today and reported in an update later today or tomorrow. We have requested that the electricians place a third electrical panel on the north side of the excavation to allow 24/7 pumping of wells in that area. Resampling of MW-5 on 11/06 confirms a benzene detection of 0.070 mg/L (the previous result was 0.045 mg/L sampled on 10/15). This well will be monitored more frequently for plume delineation; no product or odor has been detected in the well. Water level measurements will be made this week to provide an updated groundwater map showing direction of groundwater movement and gradient.

#### Hobbs South GSA 8" Crude Line

Product recovery is continuing 24/7 using the PVC pumps until failure. Pumps are being replaced in the excavation as they fail, but following pump failure at other locations the wells will be pumped at least weekly using a portable pump and tote on a trailer. The stainless steel prototype pump has been shipped and will arrive this week. We continue talks with the supplier and manufacturer regarding the need for a more sturdy, cost-efficient pump for oil recovery. Drillers will be on site this morning to continue borehole placement to the east and to the west of the excavation as requested by OCD. Also, this week we will perform groundwater sampling of the monitor wells at the site.

#### Hobbs North GSA 8" Crude Line

We have discussed pumping and solar panel problems with Dixie Electric. The solar panel is limited to 12 volts output. They have suggested that we place a second battery in parallel at the box to produce additional amps. If that does not work, we will put a power booster on the pump.

Darrell Moore  
Environmental Manager for Water and Waste  
Navajo Refining Company  
P.O. Box 159  
Artesia, NM 88211  
Direct Phone: 505-746-5281  
Fax: 505-746-5421  
Cell: 505-365-4364

12/1/2003



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
Betty Rivera  
Cabinet Secretary

Lori Wratenberg  
Director  
Oil Conservation Division

FAX

TO: RANDY BAILESS

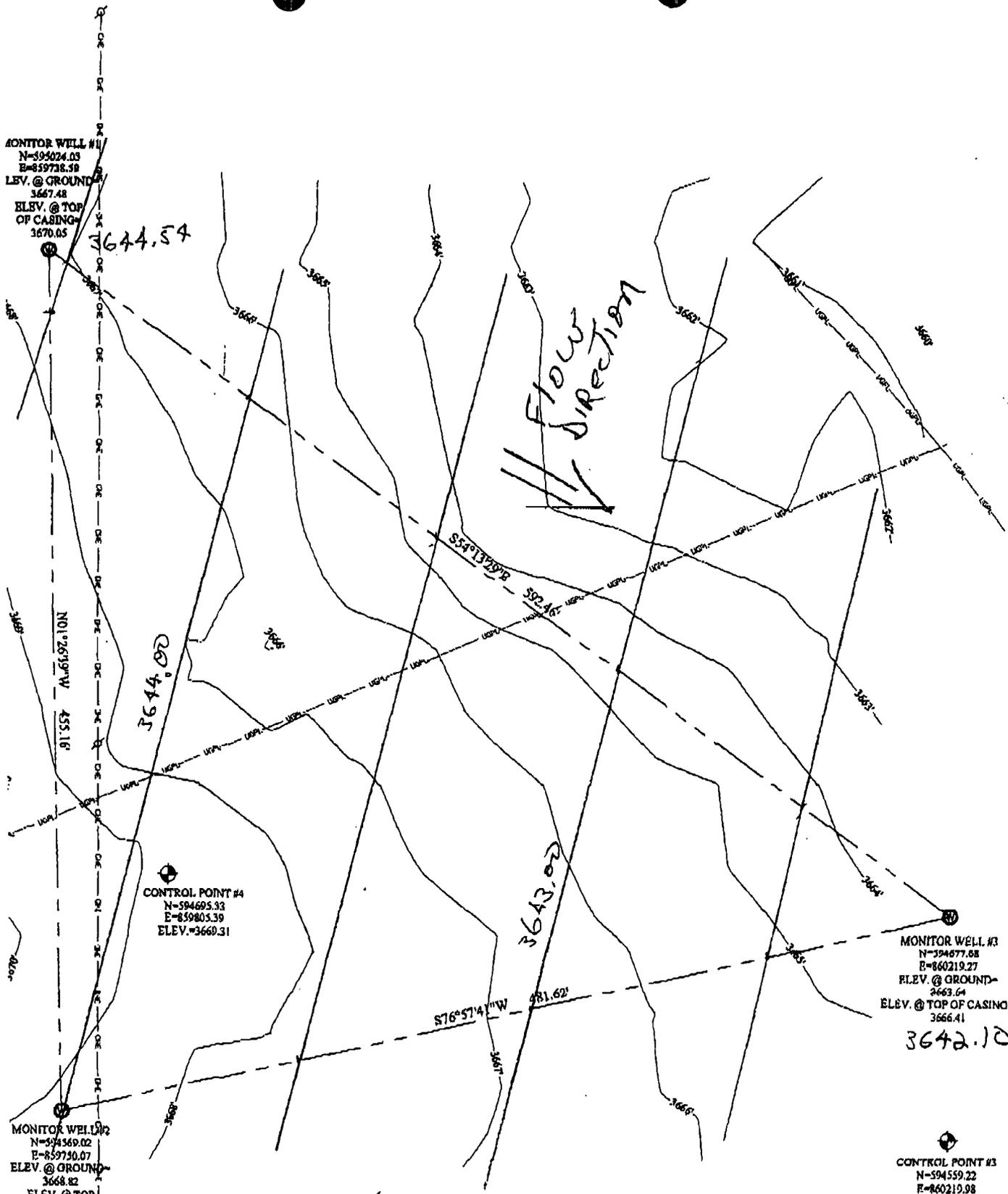
FROM: LARRY  
Energy Minerals and Natural Resources Department,  
Oil Conservation Division

RE: NAVAJO SITE

DATE: 10/16/02

HAVE 7 PRODUCERS @ THIS POINT.

2 Pages (Including Transmittal)



MONITOR WELL #1  
 N=595024.03  
 E=859718.59  
 LEV. @ GROUND= 3667.48  
 ELEV. @ TOP OF CASING= 3670.05

N01°26'19"W 435.16'

CONTROL POINT #4  
 N=594695.33  
 E=859803.39  
 ELEV.=3660.31

MONITOR WELL #3  
 N=594677.88  
 E=860219.27  
 ELEV. @ GROUND= 3663.04  
 ELEV. @ TOP OF CASING= 3666.41  
 3642.10

MONITOR WELL #2  
 N=594569.02  
 E=859730.07  
 ELEV. @ GROUND= 3668.82  
 ELEV. @ TOP OF CASING= 3671.40

CONTROL POINT #3  
 N=594559.22  
 E=860219.98  
 ELEV.=3665.24

3644.00  
 D.R.B.  
 10/15/02

1 in = 50'  
 Gradient =  $\frac{1}{222} = 0.0045$  ESE  
 $K = 4$  to  $400$  ft/yr,  $V = Ki = 0.018$  to  $1.8$  ft/yr



# REFINING COMPANY

FAX  
(505) 746-5283 DIV. ORDERS  
(505) 746-5481 TRUCKING  
(505) 746-5458 PERSONNEL

501 EAST MAIN STREET • P. O. BOX 159  
ARTESIA, NEW MEXICO 88211-0159  
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FAX  
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(505) 746-5451 EXEC/MKTG  
(505) 746-5421 ENGINEERING  
(505) 746-5480 PIPELINE

July 16, 2002

**RECEIVED**

**JUL 19 2002**

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

Mr. Larry Johnson  
Environmental Engineer  
Oil Conservation Division  
1625 N. French Dr.  
Hobbs, NM 88240

**RE: Work Plan for South Hobbs GSA 8" Gathering Line**

Dear Mr. Johnson,

Enclosed, please find the work plan for the remediation of Navajo's 8" gathering line at Hobbs Station. Please look the plan over and give us any feedback you think would be beneficial. We would like to begin this clean-up as soon as possible.

If there are any questions concerning this submission, please call me at 505-748-3311.  
Thank you for your attention to this matter.

**NAVAJO REFINING COMPANY**

Darrell Moore  
Environmental Mgr. for Water and Waste

Encl.

Cc: Bill Olsen, OCD-Santa Fe



TRANSMITTAL COVER SHEET

393-4788

OIL CONSERVATION DIVISION  
1220 S. ST. FRANCIS DRIVE  
SANTA FE, NM 87505  
(505) 476-3440  
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Dave Boyer - Safety & Envir. Solutions

FROM: Bill Olson

DATE: 2/22/02

PAGES: 2 with cover

SUBJECT: \_\_\_\_\_

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.



THE CITY OF  
**HOBBS, NEW MEXICO**

300 NORTH TURNER  
CITY ATTORNEY'S OFFICE (505) 397-9226

HOBBS, NEW MEXICO 88240

FAX (505) 397-0379

e-mail address: aallen@hobbsnm.org

February 4, 2002

Mr. Wayne Price  
Oil Conservation Division  
1625 N. French Drive  
Hobbs, NM 88240

Re: Navajo Refining Contamination Site on West Marland St., Hobbs

Dear Wayne:

The City of Hobbs hereby gives formal notice of its request that your Division schedule a hearing relating to the application of Navajo Refining for remedial work concerning the ground contamination at the Wright Welding location on West Marland Street in Hobbs.

At your earliest convenience please advise the City of the date, time, and place of your hearing.

If the City needs to file any other documents, other than this letter, with your office in order to be advised of and to be heard at the hearing, please advise.

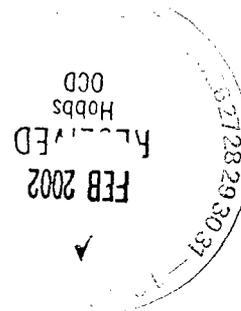
Thank you very much,

THE CITY OF HOBBS, NEW MEXICO

  
Gary Don Reagan  
City Attorney

GDR/aa

cc: Bo Thomas, City Manager  
David Hooten, Emergency Management/Safety





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Betty Rivera**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

FAX

476-3462

TO: Wayne Price

FROM: Paul Sheeler  
Energy Minerals and Natural Resources Department,  
Oil Conservation Division

RE: Foreward this letter

DATE: 2-5-02

*Wayne,*

*I don't know if you got this letter.  
Let me know if you need the hand copy  
original.*

*Thanks,  
Paul*

2

Pages (Including Transmittal)



THE CITY OF  
**HOBBS, NEW MEXICO**

300 NORTH TURNER • HOBBS, NEW MEXICO 88240  
CITY ATTORNEY'S OFFICE (505) 397-9226 • FAX (505) 397-0379  
e-mail address: [aallen@hobbsnm.org](mailto:aallen@hobbsnm.org)

February 4, 2002

Mr. Wayne Price  
Oil Conservation Division  
1625 N. French Drive  
Hobbs, NM 88240

Re: Navajo Refining Contamination Site on West Marland St., Hobbs

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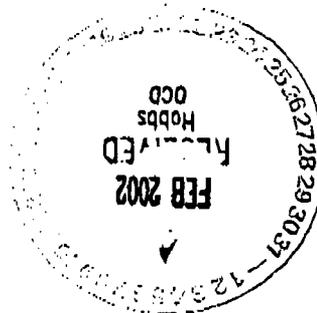
Thank you very much,

THE CITY OF HOBBS, NEW MEXICO

*Gary Don Reagan*  
Gary Don Reagan  
City Attorney

GDR/aa

cc: Bo Thomas, City Manager  
David Hooten, Emergency Management/Safety



**Olson, William**

---

**From:** Sheeley, Paul  
**Sent:** Tuesday, January 29, 2002 9:01 AM  
**To:** Olson, William  
**Subject:** Product in monitor well

Darrell Moore of Navajo Refining reported 10" of product in a monitor well on the south end of their Hobbs North GSA ^" Gathering Line Located at: UL A, sec 5-T19E-R38E.

Thanks,  
PS



# REFINING COMPANY

FAX  
(505) 746-5283 DIV. ORDERS  
(505) 746-5481 TRUCKING  
(505) 746-5458 PERSONNEL

501 EAST MAIN STREET • P. O. BOX 159  
ARTESIA, NEW MEXICO 88211-0159  
TELEPHONE (505) 748-3311

FAX  
(505) 746-5419 ACCOUNTING  
(505) 746-5451 EXECUTIVE  
(505) 746-5421 ENGINEERING  
(505) 746-5480 P / L

January 2, 2002

**RECEIVED**

**JAN 04 2002**

Mr. Bill Olsen  
New Mexico Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

**RE: Hobbs North GSA Spill, Navajo Refining Company**

Dear Bill,

As per our phone discussion of December 27, 2001, the contaminated soil that is removed from the Hobbs GSA leak will be taken to CRI. There is no analysis needed per OCD's letter from Roger Anderson to me dated June 13, 2001. This leak was a crude oil leak.

If you need any further information, please call me at 505-748-3311. Thank you for your attention to this matter.

Sincerely,  
NAVAJO REFINING COMPANY

Darrell Moore  
Environmental Manager for Water and Waste



## REFINING COMPANY

FAX

(505) 746-5283 DIV. ORDERS  
(505) 746-5481 TRUCKING  
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501 EAST MAIN STREET • P. O. BOX 159  
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FAX

(505) 746-5419 ACCOUNTIN  
(505) 746-5451 EXECUTIVE  
(505) 746-5421 ENGINEERIN  
(505) 746-5480 P / L

July 19, 2001

Mr. Paul Sheeley  
New Mexico Oil Conservation Division  
1625 French Drive  
Hobbs, NM 88240

Re: Work Plan Submittal For Remediation/Cleanup of Hobbs North GSA 6" Gathering  
Line Crude Oil Release

Dear Mr. Sheeley,

Enclosed please find a work plan for further cleanup and remediation of a crude oil gathering line leak that occurred in January of this year. The work plan reports on the work conducted at the site in response to the release and details how we plan to remove remaining contaminated soils from the site of the spill. It also presents the results of soil and groundwater testing conducted to date.

We desire to begin work on this remediation as soon as possible, and hope to receive your comments and/or approval of this work plan as soon as practicable.

Sincerely,

Darrell Moore  
Environmental Manager for Water and Waste

Enc. Remediation/Cleanup Work Plan

cc. Jim Townsend, Navajo Refining  
OCD District 1, Hobbs  
David Boyer, Safety and Environmental Solutions, Hobbs

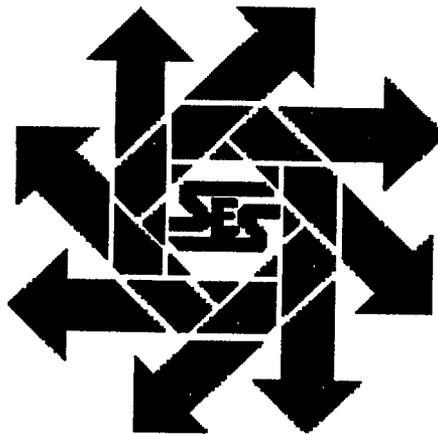
IS previous leak  
pertinent and  
an assumption.

Wa

**Navajo Refining Company  
Hobbs North GSA 6" Gathering Line**

**Remediation/Cleanup Work Plan  
Hobbs, Lea County, New Mexico**

July 3, 2001



*Prepared for:*

**Navajo Refining Company  
P.O. Box 159  
Artesia, New Mexico 88211**

*By:*

***Safety & Environmental Solutions, Inc.  
703 E. Clinton Suite 103  
Hobbs, New Mexico 88240  
(505) 397-0510***

performed and  
are assumptions

6  
Final

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Boreholes SB-5 & SB-6 for prod. so (see IV) Extent Beyond Pore holes?

**I. Purpose**

The purpose of this work plan is to propose a plan for the cleanup of the pipeline leak that occurred on the Hobbs North GSA Unit 6-inch pipeline in the NE/4, NE/4, Section 5, T19S, R38E in Lea County, New Mexico. The location is within the City of Hobbs and several hundred feet northwest of the intersection of Rash and Humble streets in southwest Hobbs. This plan will allow closure in a manner that will protect the population, environment and groundwater of the area surrounding the subject location. The leak site is situated on a relatively level site (Figure 1, Vicinity Map).

**II. Background**

A pipeline leak occurred resulting in the discharge of an unknown quantity of crude oil on Friday, January 5, 2001. The leak was reported to the NMOCD District One office in Hobbs. Initial response at the time of the leak included excavation of the surface and subsurface material most impacted by the leak. Approximately 412 cubic yards of contaminated soil was removed and transported to Controlled Recovery Inc. (CRI), an NMOCD approved disposal facility, on January 9.

**III. Contaminate and Size of Leak**

Initial excavation of in the vicinity of the crude oil leak encompassed a volume of 51 ft. by 18 ft. by 13 ft. Navajo Refining Company has received notification from the Oil Conservation Division that the crude oil in this pipeline does not have to be subjected to the Toxic Leaching Characteristic Procedure (TCLP) for toxicity. No evidence of other contaminants was observed.

**IV. Vertical and Horizontal Extent of Contamination**

The initial vertical and horizontal extent of the contamination was determined by the excavation as described above and by follow-up drilling performed in February. Additional exploratory boreholes were drilled in May 2001. The soil boring locations are shown in Figure 2. Some boreholes are shallow due to drilling auger refusal in the heavily cemented caliche. Also, two boreholes (SB-5, SB-6) showed evidence of free product saturation at 20-25 ft.

Analyses of the soil samples collected from the sides and bottom of the excavation, and from boreholes are summarized in Table 1. The results of the soil boring program show detectable contamination in an area having a radius of approximately 25 to 30 ft. from the leak location and to a depth of 30-35 ft. in at least two boreholes. Further delineation will be determined by excavation at the time of cleanup as described in the Action Plan below.

**V. Groundwater**

Two groundwater monitor wells were installed at the site in February 2001. A third well was installed in May. The well locations were surveyed, depth-to-water measurements taken, and a groundwater potentiometric contour map drawn. Depth to water in the wells is approximately 35 ft. The map (Figure 3) shows groundwater flow direction to be southeasterly, which is the general direction of groundwater movement in the Hobbs area.

are assumptions  
valid?

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July 3, 2001

e Work Plan

Navajo Refining Company

Following installation and development of the three wells, samples for benzene, toluene, ethylbenzene and xylenes (BTEX) were taken on June 1, 2001. These results are also shown on Figure 3. Well MW-1 shows benzene 0.26 mg/L which is in excess of the NM WQCC and NM OCD water quality standard of 0.010 mg/L. Ethylbenzene and total xylenes also exceed water quality standards. The analytical results of sampling of wells MW-2 and MW-3 are at or below sample detection limits for these constituents.

Although BTEX results from this well are highly elevated, the well is both upgradient and off-gradient from the leak location. Discussion with the land owner (Mr. Lewis Wright) revealed that an earlier leak in the area occurred in 1993 at a location 50 to 100 ft. north of MW-1. Therefore, it is unlikely that elevated sample results in MW-1 are a result of the current release.

#### VI. Soil Remediation Action Levels

Based on observations while drilling and results of the soil sampling, some highly contaminated soils remain at the site. However, most of the soil remaining within a 25 ft. radius of the leak area would be characterized by NMOCD guidelines ("**Guidelines for Remediation of Leaks, Spills and Releases**" *New Mexico Oil Conservation Division - August 13, 1993*) as Unsaturated Contaminated Soils. The guidelines include minimum cleanup criteria based on risk-based ranking criteria. Application of the NMOCD's ranking criteria for contaminated soils at this site is presented below.

The field data indicates that the interval between the leak and the water table does not exceed 50 ft. Therefore, 20 points would be assigned to the site as a result of this criterion. Also, based on State Engineer records, water wells are located within 1,000 ft. of the site and an additional 20 points would be assigned to the site. Further, there are no surface water bodies within 1,000 ft. of the site (0 points). The results were compared to the contaminate levels specified in the guidelines:

Depth to Ground Water:	20 points
Distance to Well Head or Water Source:	20 points
Distance to Surface Water/Waterways:	0 points
<b>Total Score:</b>	<b>40 points</b>

Applying the ranking criteria specified in the NMOCD Guidelines to this site results in cleanup levels of 10 mg/Kg benzene, 50 mg/Kg total BTEX and 100 ppm TPH.

Additional site characterization will be performed as part of the proposed remediation/closure plan presented below. All samples will be collected with adherence to the SOPs found in **Environmental Protection Agency, 1984, Characterization of Hazardous Waste Site - A Methods Manual: Vol. II**. These samples will be representative of the contamination levels and will be analyzed for BTEX and Total Petroleum Hydrocarbons (TPH) content using EPA methods SW-846 8021-B, and EPA method 8015 (modified), respectively.

## **VII. Action Plan**

### **Additional Excavation**

Due to the proximity of groundwater at 35 feet, additional excavation will be conducted at the leak site, and material will be excavated both horizontally and vertically for the removal of contaminated soils. Excavation will be somewhat difficult due to the depth which may be required to remove the soils, and the known subsurface occurrence at 15 to 25 ft. of heavily cemented caliche. Further complicating the effort is the presence in the immediate area of the Navajo pipeline, an Equilon pipeline, a power pole supporting a high voltage power line, and a chain-link fence surrounding an Oxy-Permian production site immediately to the west of the leak. The power pole and fence will be relocated prior to excavation, and the all buried utilities and pipelines located through the New Mexico One Call service prior to further excavation.

The excavated material will be segregated on site with contaminated soils transported to CRI for disposal. Based on the drilling results, the cemented caliche will need to be broken for removal and will not likely require disposal unless free product is encountered in joints and fractures. Further, if soils are found to be excessively moist or saturated, they will be placed on plastic and mixed with drier contaminated material prior to transport. On-site field-testing will be conducted to ensure the removal of said soils to below the NMOCD requirements for TPH levels. The bottom and sides of the hole will be sampled at the final excavation depths. These samples will be tested for TPH with a third party laboratory for confirmation of the contamination levels present.

### **Excavation Closure**

Once the results of the test samples for the final excavation are received and confirmation of the excavated area soils' results is obtained, the excavation will be backfilled with the clean material segregated on site and with soil already stockpiled on site by the land owner. A closure report for the soils investigation and evacuation will be prepared and filed with the NMOCD.

### **Follow-up Groundwater Investigation**

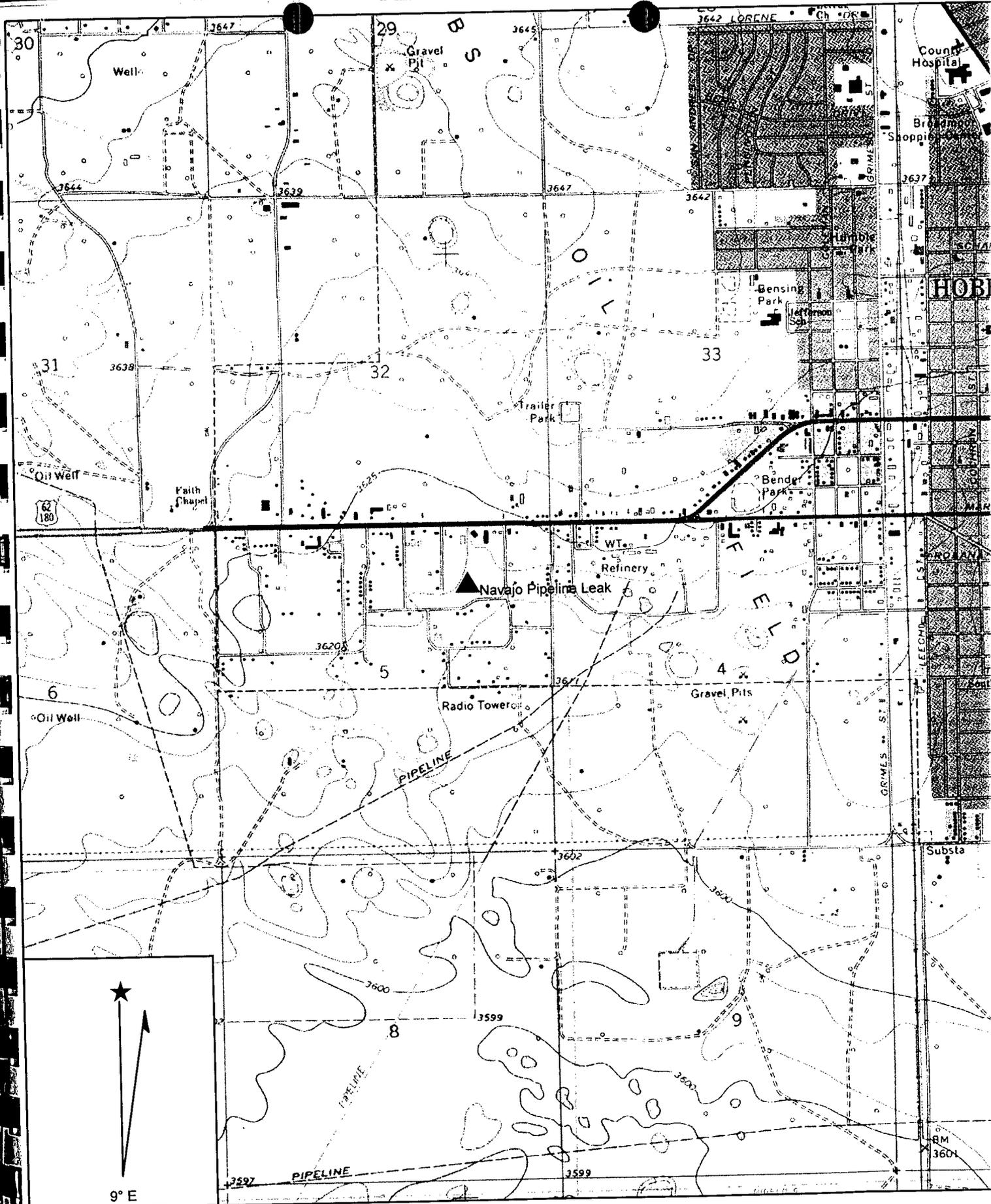
Following removal of the contaminated soil and evaluation of the actual horizontal and vertical extent of the contamination, the need for additional groundwater investigation will be evaluated. That could include location of additional monitor wells and preparation of a clean-up/remediation plan for groundwater. At the very least, an additional round of groundwater elevation measurements and sampling (for BTEX and other WQCC constituents) will be conducted before making a decision on action to be taken. The situation is complicated by the discovery of elevated BTEX concentrations in the upgradient/off-gradient monitor well. Based on current information, that contamination appears unrelated to the current leak, but more will be known following the planned excavation.

Table 1. Results of Soils Testing, Navajo Hobbs North GSA 6" Gathering Line Leak

Sample Location and Depth	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-benzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TPH (mg/Kg)
W. Wall, South	01/08/01	1.42	3.42	9.71	54.9	69	3,390	13,800	17,190
W. Wall, North	01/08/01	NS	NS	NS	NS	NS	3,660	15,600	19,260
East Wall	01/08/01	4.09	6.75	16.4	103	130	5,730	33,500	39,230
Spill, New Surface	01/08/01	3.63	<2.00	2.27	42.5	48.4	2,480	7,780	10,260
Bottom, North	01/08/01	6.30	8.00	15.5	90.7	121	4,400	8,200	12,600
Bottom, South	01/08/01	NS	NS	NS	NS	NS	3,230	7,000	10,230
SB-1, 5 ft.	02/19/01	<0.005	0.006	0.009	0.10	0.115	<50	353	353
SB-1, 10 ft.	02/19/01	<0.005	0.006	<0.005	0.02	0.026	<50	<50	<100
SB-1, 15 ft.	02/19/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	237	237
SB-1, 18 ft.	02/19/01	0.021	0.824	2.45	15.7	19.0	672	2,530	3,202
SB-1, 20 ft.	02/19/01	<0.005	0.127	1.60	10.7	12.4	439	3,190	3,629
SB-1, 24 ft.	02/19/01	0.009	0.395	1.42	8.19	10.0	833	3,710	4,543
SB-2, 10 ft.	02/27/01	<0.005	0.005	<0.005	<0.015	0.005	<50	<50	<100
SB-2, 20 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-2, 30 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-2, 40 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-3, 10 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-3, 20 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	128	128
SB-3, 30 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-4, 10 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-4, 20 ft.	02/27/01	0.038	<0.005	0.029	<0.015	0.067	<50	<50	<100
SB-4, 30 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-4, 40 ft.	02/27/01	<0.005	<0.005	<0.005	<0.015	<0.030	<50	<50	<100
SB-5, 10 ft.	05/08/01	NS	NS	NS	NS	NS	NS	NS	1,680
SB-5, 15 ft.	05/08/01	NS	NS	NS	NS	NS	NS	NS	1,900
SB-5A, 10 ft.	05/24/01	<0.025	0.35	0.535	<0.025	0.885	64.7	668	733
SB-5A, 15 ft.	05/24/01	0.17	0.395	0.942	3.57	5.08	38.2	236	274
SB-5A, 20 ft.	05/24/01	0.783	0.701	2.56	12.4	16.4	148	2,100	2,248
SB-5A, 30 ft.	05/24/01	8.81	9.72	19.7	66.3	105	904	3,520	4,424
SB-5A, 35 ft.	05/24/01	0.23	0.424	1.32	3.75	5.72	54.6	80	135

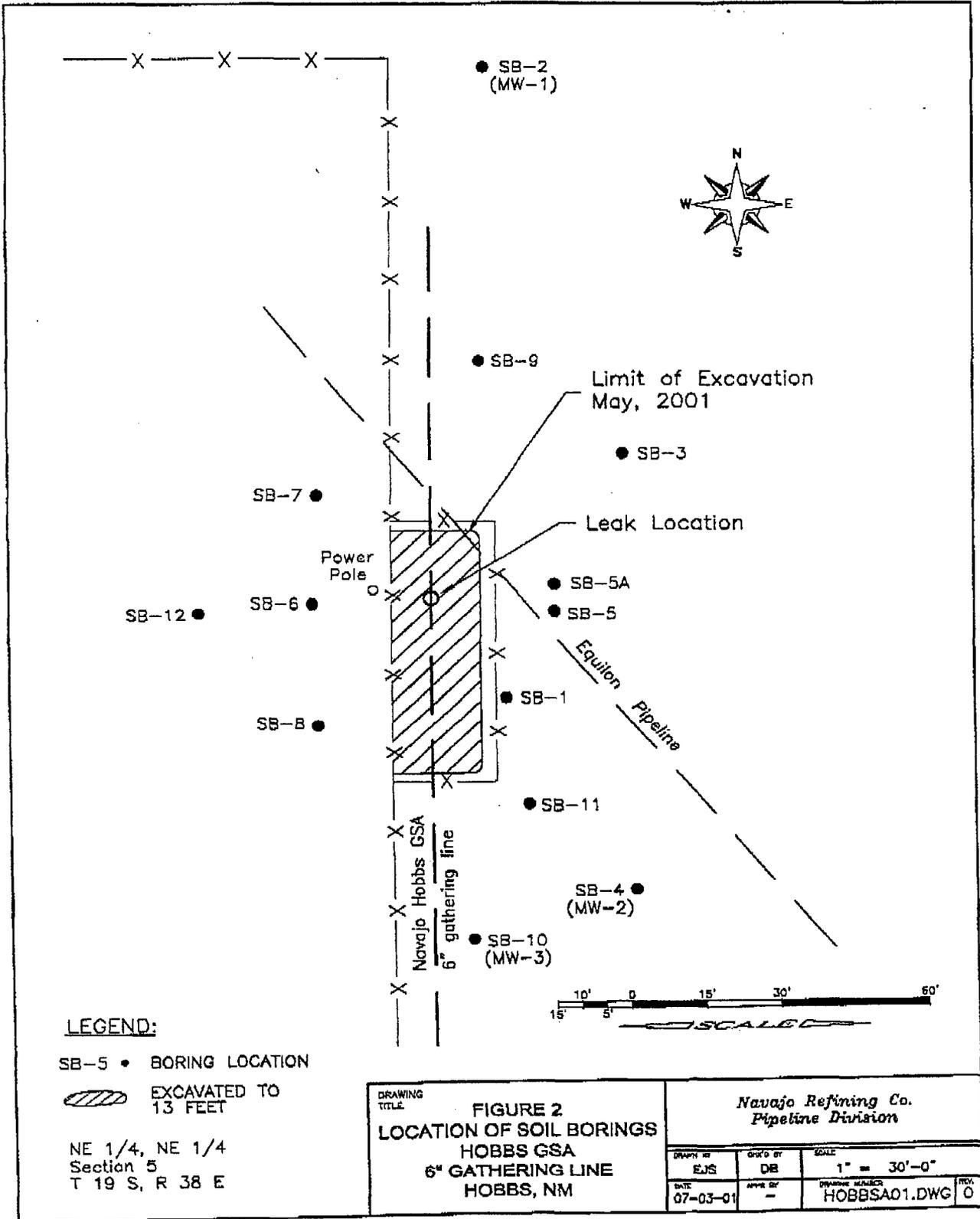
Table 1. Results of Soils Testing, Navajo Hobbs North GSA 6" Gathering Line Leak

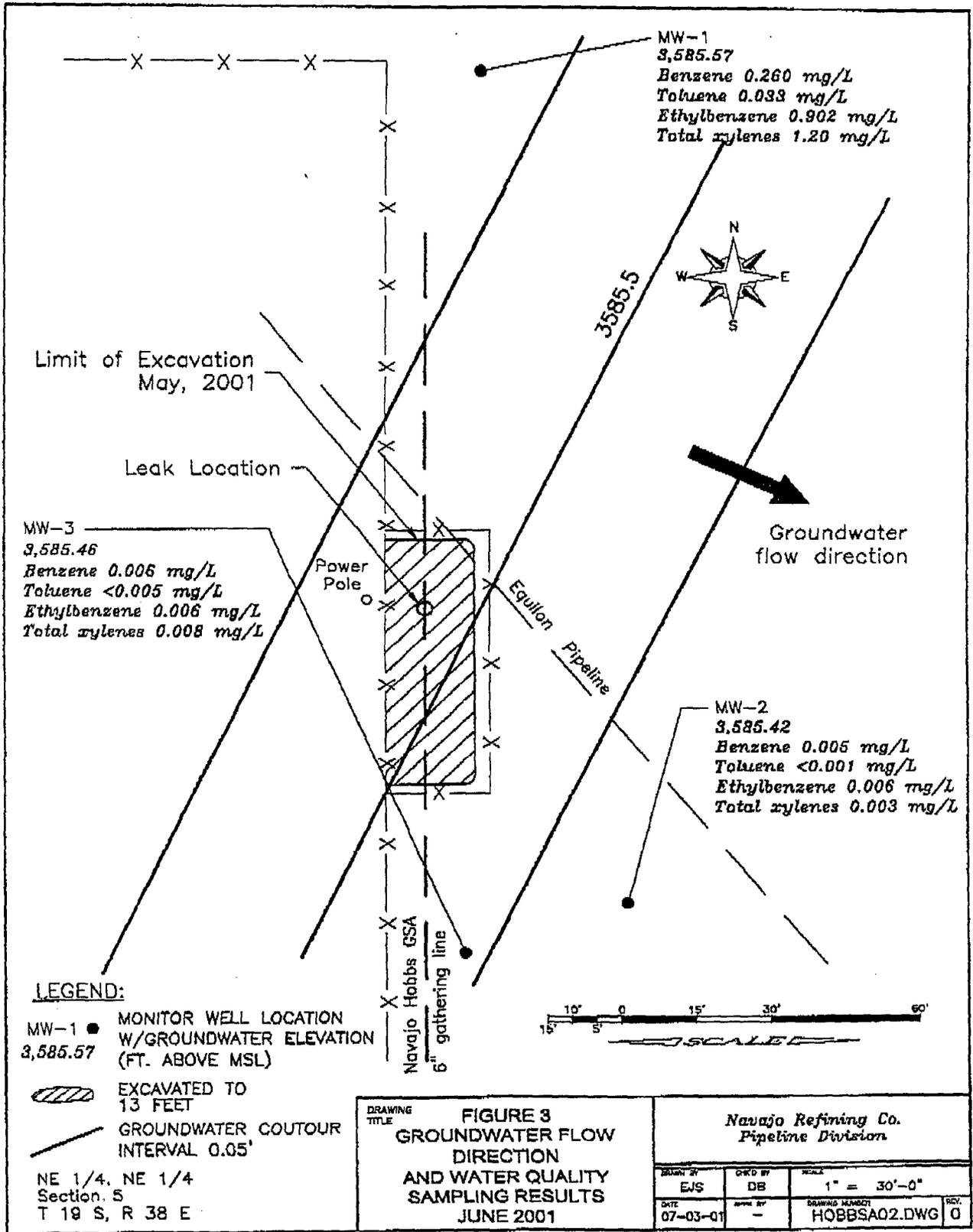
Sample Location and Depth	Sample Date	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-benzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	GRO (mg/Kg)	DRO (mg/Kg)	TPH (mg/Kg)
SB-6, 10 ft.	05/24/01	<0.013	<0.013	0.185	0.498	0.683	4.4	<50	4.4
SB-6, 15 ft.	05/24/01	0.0947	<0.013	0.305	1.02	1.420	16	105	121
SB-6, 20 ft.	05/24/01	<0.025	0.494	1.65	8.76	10.90	73	2,320	2,393
SB-6, 25 ft.	05/24/01	3.74	7.62	12.9	48.1	72.4	578	11,400	11,978
SB-6, 30 ft.	05/24/01	<0.025	0.415	1.09	4.82	6.33	52.5	2,330	2,383
SB-6, 35 ft.	05/24/01	0.11	0.236	0.633	3.3	4.28	24.6	402	427
SB-7, 5 ft.	05/24/01	<0.025	<0.025	<0.025	<0.025	<0.100	<2.5	<50	<52.5
SB-7, 10 ft.	05/24/01	<0.013	<0.013	0.191	0.52	0.711	6.3	<50	6.3
SB-8, 5 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
SB-9, 5 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
SB-9, 10 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
SB-10, 10 ft.	05/25/01	<0.013	<0.013	<0.013	0.489	0.489	<1.3	<50	<51.3
SB-10, 15 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
SB-10, 20 ft.	05/25/01	<0.013	<0.013	<0.013	0.485	0.485	<1.3	<50	<51.3
SB-10, 25 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
SB-10, 30 ft.	05/25/01	<0.013	0.182	0.182	0.488	0.852	<1.3	<50	<51.3
SB-10, 35 ft.	05/25/01	<0.013	<0.013	<0.013	0.488	0.488	<1.3	<50	<51.3
SB-10, 40 ft.	05/25/01	<0.013	0.182	<0.013	0.487	0.669	<1.3	<50	<51.3
SB-11, 10 ft.	05/24/01	<0.013	<0.013	<0.013	0.492	0.492	4.0	<50	4.0
SB-11, 15 ft.	05/24/01	<0.013	<0.013	0.194	0.508	0.702	1.68	<50	1.68
SB-12, 5 ft.	05/25/01	<0.013	<0.013	<0.013	<0.013	<0.052	<1.3	<50	<51.3
Notes:									
NS - Not sampled									
Samples in January, February 2001 collected by Environmental Technology Group, Inc., Hobbs.									
Samples in May 2001 collected by Safety and Environmental Solutions, Inc., Hobbs.									
Auger refusal in SB-5 at 15 ft. with Giddings drill rig, moved over to SB-5A to start drilling with Atkins rig.									
BTEX analyses by SW-846 method 8021-B; Jan-Feb 2001 by Cardinal Laboratories, Hobbs, NM; all other analyses by TraceAnalysis, Lubbock, TX.									
TPH analyses by EPA method 8015 (modified); Jan-Feb 2001 by Cardinal Laboratories, Hobbs, NM; SB-5 samples in field by SESI (using EPA method 418.1); all other analyses by TraceAnalysis, Lubbock, TX.									
TPH GRO range: C <sub>6</sub> -C <sub>10</sub> Cardinal Laboratories, C <sub>6</sub> -C <sub>12</sub> TraceAnalysis									
TPH Diesel range: >C <sub>10</sub> -C <sub>28</sub> Cardinal Laboratories, >C <sub>12</sub> -C <sub>28</sub> TraceAnalysis									



Name: HOBBS WEST  
 Date: 7/7/2001  
 Scale: 1 inch equals 2000 feet

Location: 032° 41' 33.9" N 103° 09' 47.7" W  
 Caption: Figure 1. Vicinity Map







# REFINING COMPANY

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(505) 746-5458 PERSONNEL

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(505) 746-5421 ENGINEERING  
(505) 746-5480 P / L

November 21, 2001

Mr. Bill Olsen  
Hydrogeologist  
New Mexico Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

01 NOV 26 PM 3:31  
OIL CONSERVATION DIV.

**RE: Work Plan for Navajo's GSA 6" Line, Hobbs, NM**

Dear Bill,

Here is the work plan that Paul told me had been forwarded to you. This would have been sometime around the middle of July, 2001. We would like to get started on this remediation as soon as possible. If you have any questions, please call me at 505-748-3311. Thank you for your attention.

Sincerely,  
NAVAJO REFINING COMPANY

Darrell Moore  
Environmental Manager for Water and Waste

Encl.