

GW - 75

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**  
1996 - 1999





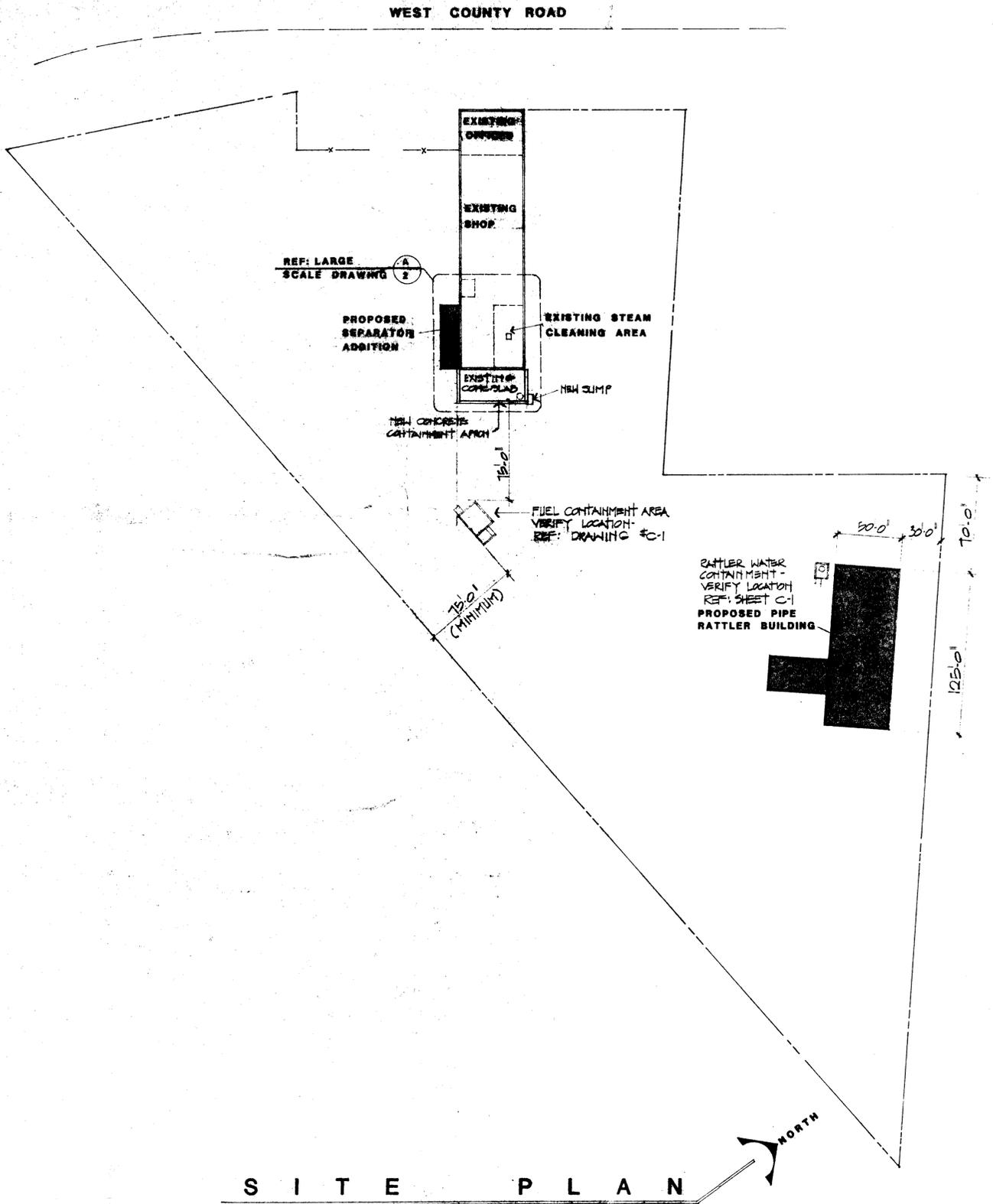
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REV	DESCRIPTION

Index To Drawings	
A1	- SITE PLAN
A2	- FLOOR PLAN SEPARATOR BUILDING
A3	- BUILDING SECTION SEPARATOR BUILDING
A4	- SUMP & WATER SCHEMATIC
R1	- RATTLER BUILDING FLOOR PLAN
R2	- RATTLER BUILDING ELEVATIONS
R3	- RATTLER BUILDING FOUNDATION PLAN
R4	- RATTLER BUILDING ELECTRICAL PLAN
S1	- RATTLER BUILDING SUMPS
C1	- SPILL CONTAINMENT DETAILS

JOB TITLE:  
**HOMCO**  
Hobbs, N.M.

SHEET TITLE:  
**Site Plan**

SCALE
DATE
DRAWN
CHECKED
APPROVED



**S I T E P L A N**  
SCALE: 1" = 50'

**RECEIVED**  
DEC 18 1990  
OIL CONSERVATION DIV.  
SANTA FE









STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

August 8, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-269-269-185**

Mr. J. David Tucker  
W.R. Grace & Co.  
6401 Poplar Ave., Suite 301  
Memphis, TN 38119-4840

**RE: GROUND WATER MONITORING  
HOMCO/WEATHERFORD HOBBS FACILITY**

Dear Mr. Tucker:

The New Mexico Oil Conservation Division (OCD) has reviewed W.R. Grace & Co.'s (Grace) May 23, 1996 "GROUNDWATER ASSESSMENT, FORMER HOMCO FACILITY, HOBBS, NEW MEXICO". This correspondence requests that Grace be relieved from responsibility for further ground water quality sampling at the former HOMCO Hobbs facility which is currently owned by Weatherford Enterra U.S., Inc. This request is based upon the results of laboratory analyses of ground water samples taken since July of 1991 and the fact that Grace no longer owns or operates the facility.

At this time the OCD does not require Grace to continue sampling the monitor wells at the facility since Grace is not the owner or operator of the facility. However, contaminants related to HOMCO's disposal activities remain in the subsurface soils and have the potential to result in contamination of underlying fresh ground water. Therefore, the OCD will require that the current or successive owners or operators sample all of the monitor wells for volatile aromatic hydrocarbons and semi-volatile organics prior to future renewals of the facility's discharge plan.

Please be advised that OCD approval for Grace to discontinue sampling does not relieve Grace of liability for contamination at the site.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor  
Wayne Price, OCD Hobbs District Office

P 269 269 185

US Postal Service

**Receipt for Certified Mail**

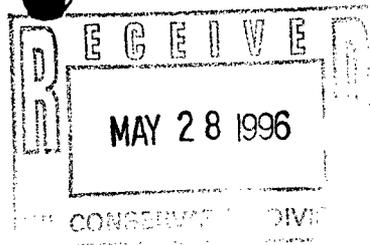
No Insurance Coverage Provided.

Do not use for International Mail (*See reverse*)

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Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
Postmark or Date	

PS Form 3800, April 1995

**GRACE**



David Tucker  
Senior Project Engineer  
**Remediation Management Department**

W. R. Grace & Co.  
6401 Poplar Avenue, Suite 301  
Memphis, TN 38119-4840

Tel: (901) 820-2027  
Fax: (901) 820-2059

May 23, 1996

Mr. William C. Olson  
Hydrogeologist/ Environmental Bureau  
State of New Mexico, Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
State Land Office Building  
PO Box 2088  
Santa Fe, NM 87504

Re: Groundwater Assessment  
Former HOMCO Facility  
Hobbs, New Mexico

Dear Mr. Olson:

The subject facility, located on West County Road in Hobbs, NM, was previously owned by HOMCO International, a subsidiary of Grace. It was sold in April 1993 and is now owned by Weatherford Enterra U.S. Inc. On April 2, 1993, HOMCO submitted a groundwater assessment report to the OCD at the agency's request. The report was prepared by ENSR Consulting and Engineering. It concluded that all constituents of concern, volatile and semi-volatile organics, were below detection limits and recommended discontinuance of groundwater monitoring. A copy of the OCD April 19, 1993, response to ENSR's report is included in the attachment hereto. OCD requested that HOMCO sample the monitor wells again prior to renewal of the facility discharge plan in 1996.

In response to the OCD request, Grace requested that ENSR sample the wells again in 1996 and provide a report of the results. ENSR collected groundwater samples on March 14, 1996, and submitted to Grace the attached report. (Weatherford Enterra, as current owner of the facility, has responsibility for renewal of the facility discharge plan).

ENSR reports that the Hobbs site wells showed no volatile or semi-volatile organics above state regulatory drinking water criteria, with the exception of well OW-3, in which benzene was detected at 54 µg/l. Based on the apparent groundwater flow direction and its review of site operational history, ENSR concludes that the source of

Mr. William C. Olson, OCD

- 2 -

May 23, 1996

the benzene was fuel storage operations on upgradient property owned by the Western Company of North America.

Based on ENSR's findings, Grace requests that OCD relieve Grace from responsibility for further sampling at the Hobbs facility.

Yours truly,

A handwritten signature in black ink, appearing to read "J. David Tucker", with a long, sweeping flourish extending to the right.

J. David Tucker  
Senior Project  
Engineer

cc: Ms. Lesa Griffin, Weatherford Enterra U.S., Inc.

May 16, 1996

Mr. David Tucker  
Senior Project Manager  
W.R. Grace & Co.  
Remediation Management Department  
6401 Poplar Avenue, Suite 301  
Memphis, TN 38119-4840

Re: Groundwater sample results and analytical report.  
Former HOMCO Facility  
West County Road  
Hobbs, New Mexico

Dear Mr. Tucker:

Based on your authorization letter of February 7, 1996, ENSR collected groundwater samples from three monitoring wells located at the former HOMCO site in Hobbs, New Mexico. This letter report summarizes project background, sample collection procedures, analytical results, and provides data interpretation.

### **Background**

The subject site, located on West County Road in Hobbs, NM was previously owned by HOMCO International, a subsidiary of Grace. While the site was operated as HOMCO, an environmental investigation and remediation program was implemented to investigate and remediate impacts to surface soils at the site. This environmental work included a soils and groundwater investigation conducted in 1991. The results of this investigation were documented and submitted to the New Mexico Oil Conservation Division (OCD) in a report titled "Phase IV Soils and Groundwater Investigation, HOMCO Site 135, Hobbs, NM", dated October 1991. This investigation included the installation of four groundwater monitoring wells at the facility.

In 1994, Grace sold HOMCO's operations and assets to Weatherford U.S., who currently owns and occupies the facility property. However, for consistency with previous submittals, the site will be referred to as the former HOMCO facility in Hobbs, New Mexico.

Several rounds of groundwater sampling have been conducted at the site from 1991 to 1993. The results of these sample events were documented in an April 1993 letter to Mr. Roger Anderson of the New Mexico OCD. The letter requested that HOMCO (now Grace) be allowed to discontinue regular monitoring of the observation wells since no volatile or semivolatile organics were detected in groundwater samples collected in January 1993.

Mr. David Tucker  
May 16, 1996  
Page 2

The OCD responded in a letter dated April 19, 1993 that indicated that HOMCO would not be required to regularly sample the monitoring wells at the site, but would be required to sample the wells prior to the renewal of the facility discharge plan in 1996. A copy of the OCD correspondence is attached. ENSR understands that Grace will not be filing a renewal for the facility discharge plan, since HOMCO (Grace) no longer owns or operates the facility.

The OCD required sample event was conducted by ENSR on March 14, 1996.

### Sampling and Analyses

#### Methods

Monitoring wells OW-1, OW-3, and OW-4 were sampled on March 13, 1996. Well OW-2 was plugged and abandoned in 1994 at the request of Weatherford. Approval to plug and abandon OW-2 was granted to Weatherford by the OCD. A copy of the approval letter is attached.

The three wells were purged using both a submersible pump and PVC bailers. Consistent with EPA protocols, all three wells were bailed completely dry and allowed to recharge before being sampled. Samples were collected and sent to Environ Express Labs. The samples were analyzed for total volatile and semi-volatile compounds, as set forth by the OCD.

#### Results

No detectable concentrations of volatile or semivolatile organics were detected in OW-1 or OW-4. Two organic compounds, xylene and benzene, were detected in well OW-3 at concentrations of 54  $\mu\text{g}/\ell$  and 24  $\mu\text{g}/\ell$  respectively. The benzene concentrations in the water exceeded the published state drinking water regulatory levels, as shown in Table 1. The xylene concentrations were below these same regulatory levels. The lab data for the March 14, 1996 sample event are attached.

A review of the data from previous sample events indicate that these VOCs have previously been detected in OW-3. In 1992, a groundwater sample collected from OW-3 had benzene and xylene concentrations of 5  $\mu\text{g}/\ell$  and 2  $\mu\text{g}/\ell$ , respectively. A sample collected from OW-3 in 1991, however, did not have detectable concentrations of these VOCs. The results from these historical sample events are also documented in Table 1.

Well OW-9, which is located on the former HOMCO facility property, belongs to Western, the property owner adjacent to the facility. OW-9 was placed by Western in April 1993 under

Mr. David Tucker  
 May 16, 1996  
 Page 3

a right of entry agreement with HOMCO. This well was installed in order to monitor impacts to groundwater from a bulk fuel storage area located on Western's property near HOMCO's fence line and upgradient of OW-3. See Figure 1. A review of the data indicates that benzene, toluene, xylene and ethylbenzene have all been previously detected in well OW-9.

**TABLE 1**

Well Sampled/Date	Benzene ( $\mu\text{g}/\ell$ )	Xylenes (Total) ( $\mu\text{g}/\ell$ )	1,2-Dichloroethane ( $\mu\text{g}/\ell$ )
State of New Mexico Action Levels	10	620	10
State of New Mexico Drinking Water Limits	5	620	10
HOMCO Well OW-3 (March 1996, Method 624)	54	24	Not Detected
HOMCO Well OW-3 (Jan 1992)	5	2	Not Detected
HOMCO Well OW-3 (July 1991, Method 524)	Not Detected	Not Detected	Not Detected

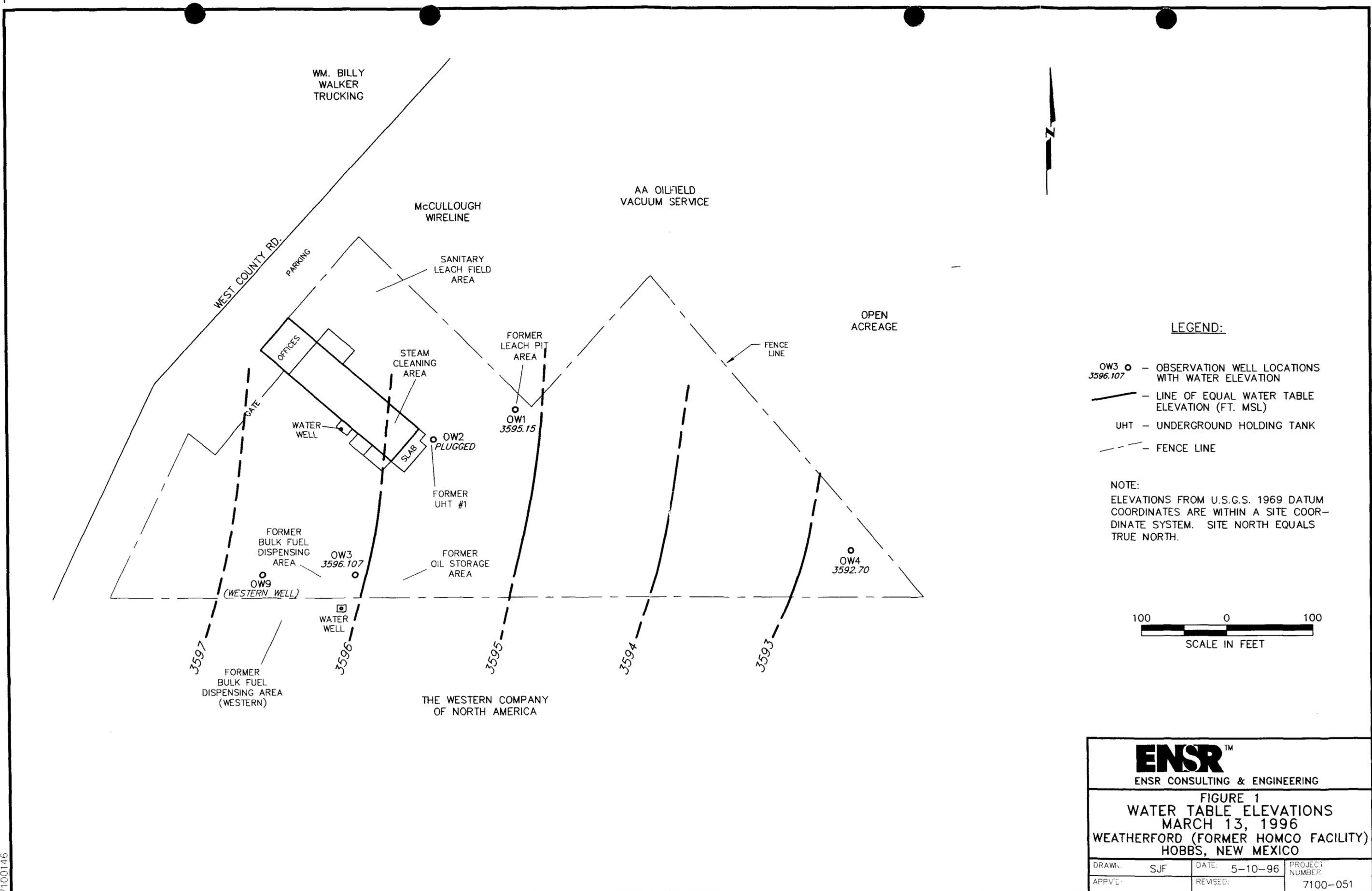
Water level measurements recorded at the Weatherford facility during the March 13, 1996 sampling event are presented below:

**TABLE 2**

Observation Well	Groundwater Elevation (FT. MSL)
OW-1	3595.15
OW-2	plugged
OW-3	3596.10
OW-4	3592.70

The groundwater contours derived from these elevations are presented in Figure 1.

**Conclusions and Recommendations**



**ENSR**<sup>TM</sup>  
ENSR CONSULTING & ENGINEERING

**FIGURE 1**  
**WATER TABLE ELEVATIONS**  
**MARCH 13, 1996**  
**WEATHERFORD (FORMER HOMCO FACILITY)**  
**HOBBS, NEW MEXICO**

DRAWN: SJF	DATE: 5-10-96	PROJECT NUMBER:
APPV'D:	REVISED:	7100-051

7100146

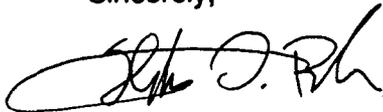
Mr. David Tucker  
May 16, 1996  
Page 4

The following observations can be made based upon the groundwater samples collected in 1996 and information obtained in the earlier investigations:

- 1) The hydrogeologic data collected from past work indicates that the general groundwater flow direction is toward the east. Subtle variations to this gradient may occur near the HOMCO and the Western drinking water wells when they are being pumped. The groundwater contour generated from the most recently measured groundwater elevations (March 1996) confirm this observation. Using the general flow direction, HOMCO well OW-3 appears near the same gradient contour as the Western drinking water well, and both are downgradient relative to the Western monitor well OW-9.
- 2) Given the differences in concentrations of benzene and xylene in groundwater between OW-3 and Western monitor well OW-9, and considering the groundwater flow gradient, the source of VOCs in the Western monitor well and OW-3 would appear to be located west (upgradient) of the Western monitor well and OW-3. A review of the site operational history indicates that the original source of groundwater impact appears to originate off-site from the HOMCO facility or be related to historical fuel storage operations on the Western property upgradient of OW-3 and the Western water well.
- 3) In light of the concentrations of benzene detected in HOMCO well OW-3 and in OW-9 and the proximity of these wells to the Western water supply well, the water quality and usage of the Western water supply well should be monitored.

If you have any questions or wish to further address any of these issues, please give me a call at (713) 520-9900.

Sincerely,



Stephen G. Beck  
Project Manager



Gil Long  
Senior Program Manager

SGB:c:\7100L005.02

Attachments:   OCD letter dated 4/19/93  
                  OCD letter dated 11/7/94  
                  Analytical Lab Data (3/96)



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

April 19, 1993

ANITA LOCKWOOD  
CABINET SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5500

CERTIFIED MAIL

RETURN RECEIPT NO. P-667-242-338

Mr. Robert J. Medler  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252

RE: GROUND WATER MONITORING ASSESSMENT  
HOMCO INTERNATIONAL, INC HOBBS FACILITY

Dear Mr. Medler:

The New Mexico Oil Conservation Division (OCD) has reviewed the April 2, 1993 "HOMCO INTERNATIONAL, INC. - SITE 135, HOBBS, NEW MEXICO, GROUNDWATER ASSESSMENT" which was submitted by ENSR Consulting and Engineering on behalf of HOMCO International, Inc. The correspondence requests elimination of all ground water monitoring of monitor wells OW-1, OW-2, OW-3 and OW-4 at the HOMCO Hobbs facility. - This request is based upon the results of laboratory analyses of ground water samples taken since July of 1991. The OCD has required ground water monitoring as part of remedial activities associated with unlined pits at the site.

Based upon the information provided in the above referenced correspondence, the OCD does not require that HOMCO continue regular sampling of monitor wells at the site. However, contaminants related to HOMCO's disposal activities remain in the subsurface soils and have the potential to result in contamination of underlying fresh ground water. Therefore, the OCD requires that HOMCO sample all of the monitor wells for volatile aromatic hydrocarbons and semi-volatile organics prior to renewal of the facility discharge plan in 1996.

If you have any questions, please call me at (505) 827-5885.

Sincerely,

  
William C. Olson  
Hydrogeologist/Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor  
Caroline Abbott Ziegler, ENSR Consulting and Engineering.

P.2  
File  
Hobbs  
Active



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

November 7, 1994

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

ANITA LOCKWOOD  
CABINET SECRETARY

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-176-012-278**

RECEIVED

MAY 15 1996

*Lea 32002*  
*3000 W. County Rd*  
*on*  
*2133 French Ave*

Ms. Lesa Griffin  
Weatherford U.S., Inc.  
1360 Post Oak Blvd., Suite 1000  
Houston, Tx 77056-3098

Re: **Plugging and Abandonment of Existing Monitor Well**  
**The Weatherford U.S., Inc. Hobbs Facility**  
**Lea County, New Mexico**

Dear Ms. Griffin:

The Oil Conservation Division (OCD) has received a request dated September 14, 1994, submitted by Envirocorp Services & Technology, Inc. (Envirocorp) on behalf of Weatherford by agent Chan Patel, requesting authorization to plug and abandon (P&A) monitor well #2 located at the above referenced facility. Based upon the information provided the request is hereby approved with the following conditions:

1. Casing will be pulled prior to cementation of the well bore.
2. An expanding cement will be used to cement the well bore from the bottom uphole to the top of the well bore.
3. A report will be submitted to the OCD 30 days after the P&A has been completed.

Please be advised that OCD approval does not relieve Weatherford of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, call me at (505) 827-5824.

Sincerely,

*[Signature]*  
Chris Eustice  
Geologist

xc: Wayne Price, OCD Hobbs Office

*Fax to c. Patel 11/15/94*



401 North 11th • La Porte, Texas 77571

Express Laboratories, Inc.

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: **ENSR**

Sample ID: **OW - 1**

Environ ID: **43713**

Project: **Weatherford, Grace, Hobbs, NM**

Matrix: **Liquid**

Date Sampled: **3/14/96**

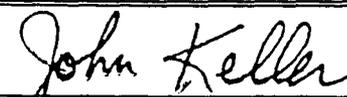
Date Received: **3/15/96**

Date/Time Analyzed: **3/18/96 20:17**

**EPA Method 624 (Modified) - Total Volatiles**

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acetone	< 50	50	67-64-1
Benzene	< 5	5	71-43-2
Bromodichloromethane	< 5	5	75-27-4
Bromoform	< 5	5	75-25-2
Bromomethane	< 10	10	74-83-9
2-Butanone	< 50	50	78-93-3
Carbon disulfide	< 5	5	75-15-0
Carbon Tetrachloride	< 5	5	56-23-5
Chlorobenzene	< 5	5	108-90-7
Chloroethane	< 10	10	75-00-3
2-Chloroethyl vinyl ether	< 10	10	110-75-8
Chloroform	< 5	5	67-66-3
Chloromethane	< 10	10	74-87-3
Dibromochloromethane	< 5	5	124-48-1
1,1-Dichloroethane	< 5	5	75-34-3
1,2-Dichloroethane	< 5	5	107-06-2
1,1-Dichloroethene	< 5	5	75-35-4
1,2-Dichloroethene (total)	< 5	5	540-59-0
1,2-Dichloropropane	< 5	5	78-87-5
cis-1,3-Dichloropropene	< 5	5	10061-01-5
trans-1,3-Dichloropropene	< 5	5	10061-02-6
Ethylbenzene	< 5	5	100-41-4
2-Hexanone	< 25	25	591-78-6
4-Methyl-2-Pentanone	< 25	25	108-10-1
Methylene Chloride	< 10	10	75-09-2
Styrene	< 5	5	100-42-5
1,1,2,2-Tetrachloroethane	< 5	5	79-34-5
Tetrachloroethene	< 5	5	127-18-4
Toluene	< 5	5	108-88-3
1,1,1-Trichloroethane	< 5	5	71-55-6
1,1,2-Trichloroethane	< 5	5	79-00-5
Trichloroethene	< 5	5	79-01-6
Vinyl acetate	< 10	10	108-05-4
Vinyl chloride	< 10	10	75-01-4
m&p-Xylene	< 10	10	1330-20-7
o-Xylene	< 5	5	1330-20-7
<b>SURROGATE RECOVERIES</b>			
<b>SURROGATE</b>	<b>CONCENTRATION</b>	<b>% RECOVERY</b>	<b>RANGE</b>
1,2-Dichloroethane-d4 (surr)	44	88	76-114
Toluene-d8 (surr)	47	94	88-110
4-Bromofluorobenzene (surr)	46	92	86-115

  
Carl Degner, GC/MS Analyst

  
John Keller, Laboratory Director



401 North 11th • La Porte, Texas 77571

Express Laboratories, Inc.

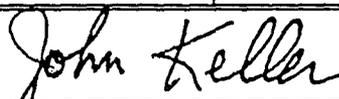
(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: **ENSR** Sample ID: **OW - 3** Environ ID: **43714**  
Project: **Weatherford, Grace, Hobbs, NM** Matrix: **Liquid**  
Date Sampled: **3/14/96** Date Received: **3/15/96** Date/Time Analyzed: **3/18/96 19:29**

**EPA Method 624 (Modified) - Total Volatiles**

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acetone	< 50	50	67-64-1
Benzene	54	5	71-43-2
Bromodichloromethane	< 5	5	75-27-4
Bromoform	< 5	5	75-25-2
Bromomethane	< 10	10	74-83-9
2-Butanone	< 50	50	78-93-3
Carbon disulfide	< 5	5	75-15-0
Carbon Tetrachloride	< 5	5	56-23-5
Chlorobenzene	< 5	5	108-90-7
Chloroethane	< 10	10	75-00-3
2-Chloroethyl vinyl ether	< 10	10	110-75-8
Chloroform	< 5	5	67-66-3
Chloromethane	< 10	10	74-87-3
Dibromochloromethane	< 5	5	124-48-1
1,1-Dichloroethane	< 5	5	75-34-3
1,2-Dichloroethane	< 5	5	107-06-2
1,1-Dichloroethene	< 5	5	75-35-4
1,2-Dichloroethene (total)	< 5	5	540-59-0
1,2-Dichloropropane	< 5	5	78-87-5
cis-1,3-Dichloropropene	< 5	5	10061-01-5
trans-1,3-Dichloropropene	< 5	5	10061-02-6
Ethylbenzene	< 5	5	100-41-4
2-Hexanone	< 25	25	591-78-6
4-Methyl-2-Pentanone	< 25	25	108-10-1
Methylene Chloride	< 10	10	75-09-2
Styrene	< 5	5	100-42-5
1,1,2,2-Tetrachloroethane	< 5	5	79-34-5
Tetrachloroethene	< 5	5	127-18-4
Toluene	< 5	5	108-88-3
1,1,1-Trichloroethane	< 5	5	71-55-6
1,1,2-Trichloroethane	< 5	5	79-00-5
Trichloroethene	< 5	5	79-01-6
Vinyl acetate	< 10	10	108-05-4
Vinyl chloride	< 10	10	75-01-4
m&p-Xylene	24	10	1330-20-7
o-Xylene	< 5	5	1330-20-7
<b>SURROGATE RECOVERIES</b>			
<b>SURROGATE</b>	<b>CONCENTRATION</b>	<b>% RECOVERY</b>	<b>RANGE</b>
1,2-Dichloroethane-d4 (surr)	45	90	76-114
Toluene-d8 (surr)	47	94	88-110
4-Bromofluorobenzene (surr)	46	92	86-115

  
Carl Degner, GC/MS Analyst

  
John Keller, Laboratory Director



401 North 11th • La Porte, Texas 77571

Express Laboratories, Inc.

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

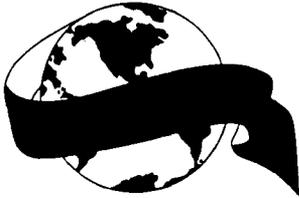
Customer: **ENSR** Sample ID: **OW - 4** Environ ID: **43715**  
Project: **Weatherford, Grace, Hobbs, NM** Matrix: **Liquid**  
Date Sampled: **3/13/96** Date Received: **3/15/96** Date/Time Analyzed: **3/18/96 16:09**

**EPA Method 624 (Modified) - Total Volatiles**

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acetone	< 50	50	67-64-1
Benzene	< 5	5	71-43-2
Bromodichloromethane	< 5	5	75-27-4
Bromoform	< 5	5	75-25-2
Bromomethane	< 10	10	74-83-9
2-Butanone	< 50	50	78-93-3
Carbon disulfide	< 5	5	75-15-0
Carbon Tetrachloride	< 5	5	56-23-5
Chlorobenzene	< 5	5	108-90-7
Chloroethane	< 10	10	75-00-3
2-Chloroethyl vinyl ether	< 10	10	110-75-8
Chloroform	< 5	5	67-66-3
Chloromethane	< 10	10	74-87-3
Dibromochloromethane	< 5	5	124-48-1
1,1-Dichloroethane	< 5	5	75-34-3
1,2-Dichloroethane	< 5	5	107-06-2
1,1-Dichloroethene	< 5	5	75-35-4
1,2-Dichloroethene (total)	< 5	5	540-59-0
1,2-Dichloropropane	< 5	5	78-87-5
cis-1,3-Dichloropropene	< 5	5	10061-01-5
trans-1,3-Dichloropropene	< 5	5	10061-02-6
Ethylbenzene	< 5	5	100-41-4
2-Hexanone	< 25	25	591-78-6
4-Methyl-2-Pentanone	< 25	25	108-10-1
Methylene Chloride	< 10	10	75-09-2
Styrene	< 5	5	100-42-5
1,1,2,2-Tetrachloroethane	< 5	5	79-34-5
Tetrachloroethene	< 5	5	127-18-4
Toluene	< 5	5	108-88-3
1,1,1-Trichloroethane	< 5	5	71-55-6
1,1,2-Trichloroethane	< 5	5	79-00-5
Trichloroethene	< 5	5	79-01-6
Vinyl acetate	< 10	10	108-05-4
Vinyl chloride	< 10	10	75-01-4
m&p-Xylene	< 10	10	1330-20-7
o-Xylene	< 5	5	1330-20-7
<b>SURROGATE RECOVERIES</b>			
<b>SURROGATE</b>	<b>CONCENTRATION</b>	<b>% RECOVERY</b>	<b>RANGE</b>
1,2-Dichloroethane-d4 (surr)	45	90	76-114
Toluene-d8 (surr)	47	94	88-110
4-Bromofluorobenzene (surr)	47	94	86-115

  
Carl Degner, GC/MS Analyst

  
John Keller, Laboratory Director



401 North 11th • La Porte, Texas 77571

Express Laboratories, Inc.

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: **ENSR** Sample ID: **OW1** Environ ID: **43713**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

Date Sampled: **3/14/96** Date Received: **3/15/96** Date Extracted: **3/16/96**

Concentration Factor: **960/1** Date/Time Analyzed: **3/20/96 17:29**

**Modified Method 625 - Semivolatiles**

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acenaphthene	< 10	10	83-32-9
Acenaphthylene	< 10	10	208-96-8
Anthracene	< 10	10	120-12-7
Benzo[a]anthracene	< 10	10	56-55-3
Benzo[b]fluoranthene	< 10	10	205-99-2
Benzo[k]fluoranthene	< 10	10	207-08-9
Benzo[g,h,i]perylene	< 10	10	191-24-2
Benzo[a]pyrene	< 10	10	50-32-8
bis(2-Chloroethoxy)methane	< 10	10	111-91-1
bis(2-Chloroethyl)ether	< 10	10	111-44-4
bis(2-chloroisopropyl)ether	< 10	10	108-60-1
bis(2-Ethylhexyl)phthalate	< 50	50	117-81-7
4-Bromophenyl phenyl ether	< 10	10	101-55-3
Butylbenzylphthalate	< 20	20	85-68-7
4-Chloroaniline	< 20	20	106-47-8
4-Chloro-3-methylphenol	< 20	20	59-50-7
2-Chloronaphthalene	< 10	10	91-58-7
2-Chlorophenol	< 10	10	95-57-8
4-Chlorophenyl phenyl ether	< 10	10	7005-72-3
Chrysene	< 10	10	218-01-9
Dibenz[a,h]anthracene	< 10	10	53-70-3
Dibenzofuran	< 10	10	132-64-9
Di-n-butylphthalate	< 10	10	84-74-2
1,2-Dichlorobenzene	< 10	10	95-50-1
1,3-Dichlorobenzene	< 10	10	541-73-1
1,4-Dichlorobenzene	< 10	10	106-46-7
3,3'-Dichlorobenzidine	< 20	20	91-94-1
2,4-Dichlorophenol	< 10	10	120-83-2
Diethylphthalate	< 10	10	84-66-2
2,4-Dimethylphenol	< 10	10	105-67-9
Dimethylphthalate	< 10	10	99-65-0
4,6-Dinitro-2-methylphenol	< 50	50	534-52-1
2,4-Dinitrophenol	< 20	20	51-28-5
2,4-Dinitrotoluene	< 20	20	121-14-2
2,6-Dinitrotoluene	< 10	10	606-20-2
Di-n-octylphthalate	< 10	10	117-84-0
Fluoranthene	< 10	10	206-44-0



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Express Laboratories, Inc.

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Customer: **ENSR** Sample ID: **OW1** Environ ID: **43713**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

Date Sampled: **3/14/96** Date Received: **3/15/96** Date Extracted: **3/16/96**

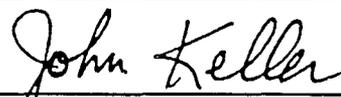
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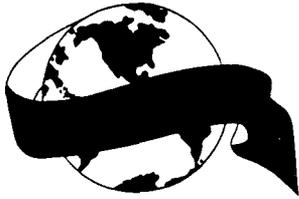
**Modified Method 625 - Semivolatiles**

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Fluorene	< 10	10	86-73-7
Hexachlorobenzene	< 10	10	118-74-1
Hexachloroethane	< 10	10	67-72-1
Hexachlorocyclopentadiene	< 10	10	77-47-4
Indeno[1,2,3-cd]pyrene	< 10	10	193-39-5
Isophorone	< 10	10	78-59-1
2-Methylnaphthalene	< 10	10	91-57-6
2-Methylphenol	< 10	10	95-48-7
4-Methylphenol	< 10	10	106-44-5
Naphthalene	< 10	10	91-20-3
2-Nitroaniline	< 50	50	88-74-4
3-Nitroaniline	< 50	50	99-09-2
4-Nitroaniline	< 50	50	100-01-6
Nitrobenzene	< 10	10	98-95-3
2-Nitrophenol	< 10	10	88-75-5
4-Nitrophenol	< 50	50	100-02-7
n-Nitrosodiphenylamine	< 10	10	86-30-6
n-Nitroso-di-n-propylamine	< 10	10	621-64-7
Pentachlorophenol	< 50	50	87-86-5
Phenanthrene	< 10	10	85-01-8
Phenol	< 10	10	108-95-2
Pyrene	< 10	10	129-00-0
1,2,4-Trichlorobenzene	< 10	10	120-82-1
2,4,5-Trichlorophenol	< 10	10	95-95-4
2,4,6-Trichlorophenol	< 10	10	88-06-2
<b>SURROGATE RECOVERIES</b>			
<b>SURROGATE</b>	<b>CONCENTRATION</b>	<b>% RECOVERY</b>	<b>RANGE</b>
Nitrobenzene-d5	32	64	35-114
2-Fluorobiphenyl	36	72	43-116
Terphenyl-d14	55	110	33-141
Phenol-d5	62	62	10-100
2-Fluorophenol	59	59	21-100
2,4,6-Tribromophenol	66	66	10-123

  
John Clayton, GC/MS Analyst

  
John Keller, Laboratory Director



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Express Laboratories, Inc.

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: **ENSR** Sample ID: **OW3** Environ ID: **43714**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

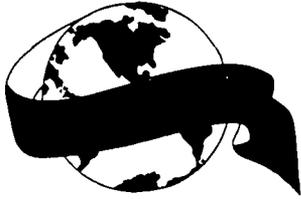
Date Sampled: **3/14/96** Date Received: **3/15/96** Date Extracted: **3/16/96**

Concentration Factor: **920/1** Date/Time Analyzed: **3/20/96 18:09**

Method Method 625 - Semivolatiles

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acenaphthene	< 11	11	83-32-9
Acenaphthylene	< 11	11	208-96-8
Anthracene	< 11	11	120-12-7
Benzo[a]anthracene	< 11	11	56-55-3
Benzo[b]fluoranthene	< 11	11	205-99-2
Benzo[k]fluoranthene	< 11	11	207-08-9
Benzo[g,h,i]perylene	< 11	11	191-24-2
Benzo[a]pyrene	< 11	11	50-32-8
bis(2-Chloroethoxy)methane	< 11	11	111-91-1
bis(2-Chloroethyl)ether	< 11	11	111-44-4
bis(2-chloroisopropyl)ether	< 11	11	108-60-1
bis(2-Ethylhexyl)phthalate	< 55	55	117-81-7
4-Bromophenyl phenyl ether	< 11	11	101-55-3
Butylbenzylphthalate	< 22	22	85-68-7
4-Chloroaniline	< 22	22	106-47-8
4-Chloro-3-methylphenol	< 22	22	59-50-7
2-Chloronaphthalene	< 11	11	91-58-7
2-Chlorophenol	< 11	11	95-57-8
4-Chlorophenyl phenyl ether	< 11	11	7005-72-3
Chrysene	< 11	11	218-01-9
Dibenz[a,h]anthracene	< 11	11	53-70-3
Dibenzofuran	< 11	11	132-64-9
Di-n-butylphthalate	< 11	11	84-74-2
1,2-Dichlorobenzene	< 11	11	95-50-1
1,3-Dichlorobenzene	< 11	11	541-73-1
1,4-Dichlorobenzene	< 11	11	106-46-7
3,3'-Dichlorobenzidine	< 22	22	91-94-1
2,4-Dichlorophenol	< 11	11	120-83-2
Diethylphthalate	< 11	11	84-66-2
2,4-Dimethylphenol	< 11	11	105-67-9
Dimethylphthalate	< 11	11	99-65-0
4,6-Dinitro-2-methylphenol	< 55	55	534-52-1
2,4-Dinitrophenol	< 22	22	51-28-5
2,4-Dinitrotoluene	< 22	22	121-14-2
2,6-Dinitrotoluene	< 11	11	606-20-2
Di-n-octylphthalate	< 11	11	117-84-0
Fluoranthene	< 11	11	206-44-0



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Express Laboratories, Inc.

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Customer: **ENSR** Sample ID: **OW3** Environ ID: **43714**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

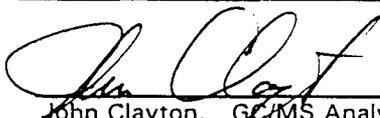
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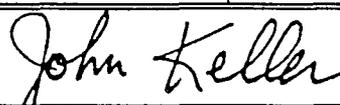
Concentration Factor: **920/1** Date/Time Analyzed: **3/20/96 18:09**

**Method Method 625 - Semivolatiles**

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Fluorene	< 11	11	86-73-7
Hexachlorobenzene	< 11	11	118-74-1
Hexachloroethane	< 11	11	67-72-1
Hexachlorocyclopentadiene	< 11	11	77-47-4
Indeno[1,2,3-cd]pyrene	< 11	11	193-39-5
Isophorone	< 11	11	78-59-1
2-Methylnaphthalene	< 11	11	91-57-6
2-Methylphenol	< 11	11	95-48-7
4-Methylphenol	< 11	11	106-44-5
Naphthalene	< 11	11	91-20-3
2-Nitroaniline	< 55	55	88-74-4
3-Nitroaniline	< 55	55	99-09-2
4-Nitroaniline	< 55	55	100-01-6
Nitrobenzene	< 11	11	98-95-3
2-Nitrophenol	< 11	11	88-75-5
4-Nitrophenol	< 55	55	100-02-7
n-Nitrosodiphenylamine	< 11	11	86-30-6
n-Nitroso-di-n-propylamine	< 11	11	621-64-7
Pentachlorophenol	< 55	55	87-86-5
Phenanthrene	< 11	11	85-01-8
Phenol	< 11	11	108-95-2
Pyrene	< 11	11	129-00-0
1,2,4-Trichlorobenzene	< 11	11	120-82-1
2,4,5-Trichlorophenol	< 11	11	95-95-4
2,4,6-Trichlorophenol	< 11	11	88-06-2
<b>SURROGATE RECOVERIES</b>			
SURROGATE	CONCENTRATION	% RECOVERY	RANGE
Nitrobenzene-d5	30	60	35-114
2-Fluorobiphenyl	36	72	43-116
Terphenyl-d14	40	80	33-141
Phenol-d5	60	60	10-100
2-Fluorophenol	58	58	21-100
2,4,6-Tribromophenol	85	85	10-123

  
John Clayton, GC/MS Analyst

  
John Keller, Laboratory Director



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Express Laboratories, Inc.

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: **ENSR** Sample ID: **OW4** Environ ID: **43715**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

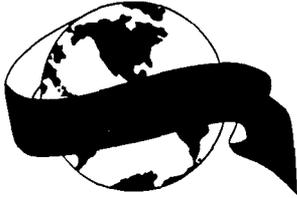
Date Sampled: **3/14/96** Date Received: **3/15/96** Date Extracted: **3/16/96**

Concentration Factor: **940/1** Date/Time Analyzed: **3/20/96 18:49**

**Modified Method 625 - Semivolatiles**

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Acenaphthene	< 11	11	83-32-9
Acenaphthylene	< 11	11	208-96-8
Anthracene	< 11	11	120-12-7
Benzo[a]anthracene	< 11	11	56-55-3
Benzo[b]fluoranthene	< 11	11	205-99-2
Benzo[k]fluoranthene	< 11	11	207-08-9
Benzo[g,h,i]perylene	< 11	11	191-24-2
Benzo[a]pyrene	< 11	11	50-32-8
bis(2-Chloroethoxy)methane	< 11	11	111-91-1
bis(2-Chloroethyl)ether	< 11	11	111-44-4
bis(2-chloroisopropyl)ether	< 11	11	108-60-1
bis(2-Ethylhexyl)phthalate	< 55	55	117-81-7
4-Bromophenyl phenyl ether	< 11	11	101-55-3
Butylbenzylphthalate	< 22	22	85-68-7
4-Chloroaniline	< 22	22	106-47-8
4-Chloro-3-methylphenol	< 22	22	59-50-7
2-Chloronaphthalene	< 11	11	91-58-7
2-Chlorophenol	< 11	11	95-57-8
4-Chlorophenyl phenyl ether	< 11	11	7005-72-3
Chrysene	< 11	11	218-01-9
Dibenz[a,h]anthracene	< 11	11	53-70-3
Dibenzofuran	< 11	11	132-64-9
Di-n-butylphthalate	< 11	11	84-74-2
1,2-Dichlorobenzene	< 11	11	95-50-1
1,3-Dichlorobenzene	< 11	11	541-73-1
1,4-Dichlorobenzene	< 11	11	106-46-7
3,3'-Dichlorobenzidine	< 22	22	91-94-1
2,4-Dichlorophenol	< 11	11	120-83-2
Diethylphthalate	< 11	11	84-66-2
2,4-Dimethylphenol	< 11	11	105-67-9
Dimethylphthalate	< 11	11	99-65-0
4,6-Dinitro-2-methylphenol	< 55	55	534-52-1
2,4-Dinitrophenol	< 22	22	51-28-5
2,4-Dinitrotoluene	< 22	22	121-14-2
2,6-Dinitrotoluene	< 11	11	606-20-2
Di-n-octylphthalate	< 11	11	117-84-0
Fluoranthene	< 11	11	206-44-0



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Express Laboratories, Inc.

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Customer: **ENSR** Sample ID: **OW4** Environ ID: **43715**

Project: **Weatherford, Grace, Hobbs, New Mexico** Matrix: **Liquid**

Date Sampled: **3/14/96** Date Received: **3/15/96** Date Extracted: **3/16/96**

Concentration Factor: **940/1** Date/Time Analyzed: **3/20/96 18:49**

**Modified Method 625 - Semivolatiles**

GCMS # 3

COMPOUNDS	CONCENTRATION (ug/l)	PQL (ug/l)	CAS #
Fluorene	< 11	11	86-73-7
Hexachlorobenzene	< 11	11	118-74-1
Hexachloroethane	< 11	11	67-72-1
Hexachlorocyclopentadiene	< 11	11	77-47-4
Indeno[1,2,3-cd]pyrene	< 11	11	193-39-5
Isophorone	< 11	11	78-59-1
2-Methylnaphthalene	< 11	11	91-57-6
2-Methylphenol	< 11	11	95-48-7
4-Methylphenol	< 11	11	106-44-5
Naphthalene	< 11	11	91-20-3
2-Nitroaniline	< 55	55	88-74-4
3-Nitroaniline	< 55	55	99-09-2
4-Nitroaniline	< 55	55	100-01-6
Nitrobenzene	< 11	11	98-95-3
2-Nitrophenol	< 11	11	88-75-5
4-Nitrophenol	< 55	55	100-02-7
n-Nitrosodiphenylamine	< 11	11	86-30-6
n-Nitroso-di-n-propylamine	< 11	11	621-64-7
Pentachlorophenol	< 55	55	87-86-5
Phenanthrene	< 11	11	85-01-8
Phenol	< 11	11	108-95-2
Pyrene	< 11	11	129-00-0
1,2,4-Trichlorobenzene	< 11	11	120-82-1
2,4,5-Trichlorophenol	< 11	11	95-95-4
2,4,6-Trichlorophenol	< 11	11	88-06-2
<b>SURROGATE RECOVERIES</b>			
SURROGATE	CONCENTRATION	% RECOVERY	RANGE
Nitrobenzene-d5	34	68	35-114
2-Fluorobiphenyl	38	76	43-116
Terphenyl-d14	43	86	33-141
Phenol-d5	67	67	10-100
2-Fluorophenol	58	58	21-100
2,4,6-Tribromophenol	76	76	10-123

John Clayton, GC/MS Analyst

John Keller, Laboratory Director



MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 9:25 AM	Date 11-10-94
---	-----------------------------------	-----------------	------------------

<u>Originating Party</u> Chan Patel (Envirocorp) on behalf of WEATHERFORD-HOBBS <u>PLANT</u>	<u>Other Parties</u> CHRIS EUSTICE
---	---------------------------------------

Discussion  
PIA of existing monitor well at Weatherford Hobbs facility, Lea Co

#1 Condition of approval for PIA of monitor well was to pull casing.

Chan says well casing is cemented from bottom to top

Wants to leave casing

Conclusions or Agreements  
Gave OK to leave casing and fill up the well w/ expanding cement.

Conclusion Signed



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

November 7, 1994

2040 S. PACHECO  
SANTA FE, NEW MEXICO 87505  
(505) 827-7131

ANITA LOCKWOOD  
CABINET SECRETARY

**CERTIFIED MAIL**

**RETURN RECEIPT NO. P-176-012-278**

Ms. Lesa Griffin  
Weatherford U.S., Inc.  
1360 Post Oak Blvd., Suite 1000  
Houston, Tx 77056-3098

**Re: Plugging and Abandonment of Existing Monitor Well  
The Weatherford U.S., Inc. Hobbs Facility  
Lea County, New Mexico**

Dear Ms. Griffin:

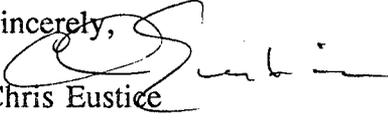
The Oil Conservation Division (OCD) has received a request dated September 14, 1994, submitted by Envirocorp Services & Technology, Inc. (Envirocorp) on behalf of Weatherford by agent Chan Patel, requesting authorization to plug and abandon (P&A) monitor well #2 located at the above referenced facility. Based upon the information provided the request is hereby approved with the following conditions:

1. Casing will be pulled prior to cementation of the well bore.
2. An expanding cement will be used to cement the well bore from the bottom uphole to the top of the well bore.
3. A report will be submitted to the OCD 30 days after the P&A has been completed.

Please be advised that OCD approval does not relieve Weatherford of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, call me at (505) 827-5824.

Sincerely,

  
Chris Eustice  
Geologist

xc: Wayne Price, OCD Hobbs Office



MEMORANDUM OF MEETING OR CONVERSATION

<input type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time	Date
------------------------------------	-----------------------------------	------	------

<u>Originating Party</u>	<u>Other Parties</u>
CHRIS EUSTICE	CHAN PATEL, AGENT WEATHERFORD (HOMCO) HOBBS

PLACE

WEATHERFORD REQUESTS PERMISSION TO P&A MONITOR  
WELL # 2

Discussion

IN THE LETTER (9-21-94) OF REQUEST, THE MONITOR WELL  
NUMBER & PROCEDURE FOR P&A WAS NOT SPECIFIED.

Conclusions or Agreements

CHAN STATED MONITOR WELL #2 WOULD BE P&A'ed using  
expanding cement from top to bottom and the casing  
would be pulled

Signature

Signed



OIL CONSERVATION DIVISION  
RECEIVED

'94 SEP 21 AM 8 50

September 14, 1994

Mr. Roger C. Anderson  
Environmental Engineer  
State of New Mexico, Oil Conservation Division  
Energy, Minerals, and Natural Resources Department  
Post Office Box 2088  
Santa Fe, New Mexico 87504

RE: Closure of an On-Site Monitoring Well, Weatherford U. S., Inc.'s Facility Located at  
3000 West County Road, Hobbs, New Mexico  
Envirocorp Project No. 10A2982

Dear Mr. Anderson:

Envirocorp Services & Technology, Inc. (Envirocorp), on behalf of Weatherford U. S., Inc. (Weatherford), is requesting permission from the State of New Mexico, Oil Conservation Division (NM-OCD), to submit a modified Waste Discharge Plan (Plan) for Weatherford's facility located at 3000 West County Road, Hobbs, New Mexico. The reason for the modification to the Plan is a result of proposed facility improvements. These improvements, in summary, include a building extension, secondary containment areas, and concrete pads to store equipment prior to cleaning. These improvements will assist in better management of the waste that are presently being generated. Envirocorp would like to submit the Plan upon completion of construction activities.

As part of the building extension, the location of the installation of a steel beam would be within the vicinity of an existing monitoring well. Therefore, Envirocorp requests permission to plug and abandon (P&A) this monitoring well. Review of files made available by Weatherford indicates a recommendation was made in a letter from ENSR on April 2, 1993, to cease groundwater monitoring at this site (attached).

This facility has recently been connected to a municipal water supply; therefore, the on-site water well is no longer required. Envirocorp would, therefore, request permission to P&A the water well at the same time as the monitoring well.

If you agree with these requisitions, please sign and forward the attached approval page and return to Envirocorp at 7020 Portwest Drive, Suite 100, Houston, Texas 77024.

Mr. Roger C. Anderson  
State of New Mexico, Oil Conservation Division

September 14, 1994  
Page 2

Should you have any questions or concerns, please feel free to contact me at (713) 880-4640. Envirocorp looks forward to receiving your approval in order to commence with the building extension.

Sincerely,



Chan B. Patel  
Hydrogeologist

CBP/csb  
Attachment

c: Wayne Price (Regional NM-OCD Office)  
Lesa Griffin (Environmental Manager, Weatherford)

## APPROVAL

Approval to plug and abandon the following:

- One (1) monitoring well.
- One (1) water well.
- Modify the Waste Discharge Plan upon completion of construction activities at Weatherford U. S., Inc.'s facility located at 3000 West County Road, Hobbs, New Mexico.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



ENSR Consulting  
and Engineering  
12201 Merit Drive, Suite 900  
2 Forcat Plaza  
Dallas, Texas 75251  
(214) 960-6855  
(214) 960-7140 (FAX)

April 2, 1993

Mr. Roger C. Anderson, Environmental Engineer  
State of New Mexico, Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RE: HOMCO International, Inc. - Site No. 135  
Hobbs, New Mexico  
Groundwater Monitoring Assessment

Dear Mr. Anderson:

ENSR is pleased to submit a summary of all groundwater analytical results from the past sampling events conducted at the referenced site. The groundwater sampling was based on requirements and recommendations approved by your agency.

Enclosed are a number of tables to display the analytical parameters, methods, dates and results for all four wells installed in 1991, the on-site water supply well, and quality control samples such as equipment blanks and trip blanks.

Tables 1 and 1A identifies each sample, the date the sample was taken and which analytical parameters, with associated EPA method, were run. Tables 2 through 5 are lists of all constituents which are analyzed for using a certain EPA method and the associated detection limits for each constituent.

Tables 6, 7 and 8 display the comprehensive results for all samples taken during each of the four sampling events.

### Summary

A written summary of each sampling event, from most recent to oldest, follows:

January 27, 1993 - All four wells, an equipment blank and a trip blank were sampled and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020. Also wells OW-1 and OW-3, plus an equipment blank and a trip blank were sampled and analyzed for semivolatiles (specifically, acid/base-neutral extractable organics) by EPA Method 8270. All analytes measured were below their associated detection limits.

# ENSR

April 2, 1993  
Mr. Roger C. Anderson  
Page 2

August 4, 1992 - Well OW-1 was sampled and analyzed for semivolatiles by EPA Methods 525 and 625. All analytes measured using EPA Method 525 were below their associated method detection limit. The results found to be above the detection limit using EPA Method 625 are presented in Table 8. BTEX was not sampled for during this event because it was not required per NMOCD recommendations. Before conducting this sampling event, Bill Olson, of your staff, was contacted to confirm the requirements for this sampling event. BTEX was scheduled to be analyzed once per year in all wells, while the semivolatiles were to be taken twice per year from Well OW-1, at a minimum.

January 23, 1992 - All four wells, a duplicate of well OW-1, an equipment blank and a trip blank were sampled and analyzed for BTEX by EPA Method 8020. Also well OW-1 was sampled and analyzed for semivolatile organics by EPA Methods 525 and 625. All analytes measured using EPA Method 625 were below their associated method detection limit. Some of the semivolatile analytes using EPA Method 525 were detected in OW-1. The analytical results for well OW-1 are presented in Table 6. BTEX compounds were detected in both OW-3 and the equipment blank (EB). The results for these two samples are presented in Tables 7 and 8, respectively.

July 18, 1991 - All four wells, a duplicate sample of well OW-1, the on-site water supply well, an equipment blank and a trip blank were tested for the following parameters using the listed methods:

- EPA Method 524 - Volatile Organics
- EPA Method 525 - Semivolatile Organics
- EPA Method 418.1 - Total Petroleum Hydrocarbons

During this sampling event all analytes were below the detection limit except for some semivolatile organics detected in well OW-1, the duplicate sample for OW-1 and well OW-3. The results are presented in Tables 6 and 7.

## Results

The analytical results were compared to both their associated Maximum Contaminant Limit (MCL) and to the New Mexico Water Quality Control Commission (NM-WQCC) standards. In two cases, the MCL was either equaled or exceeded. These occurred during the January 23, 1992, sampling event. In well OW-1 the MCL of 0.2  $\mu\text{g}/\text{L}$  was exceeded for heptachlor epoxide because the result was 3.9  $\mu\text{g}/\text{L}$ . In well OW-3 the MCL was equaled for benzene with a result of 5  $\mu\text{g}/\text{L}$ . The NM-WQCC standard for benzo(a)pyrene is 0.7  $\mu\text{g}/\text{L}$ . This level was exceeded in well OW-1 during the July 18, 1991 sampling with a result of 0.86  $\mu\text{g}/\text{L}$ .

**ENSR**

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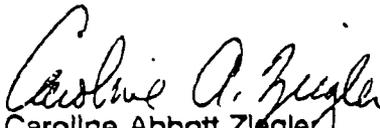
The results of the August 1992 sampling revealed that there were no semivolatile constituents which had been found previously during the other sampling events. The presence of benzene appears to be isolated since it was detected in well OW-3 only once in two sampling events. The result is equal to the MCL of 5  $\mu\text{g}/\text{L}$ . It should be noted that this well is located near the southern facility property line and is the most upgradient well. Detection of benzo(a)pyrene in July 1991 and heptachlor epoxide in January 1992 above available published limits also appear to be isolated incidents.

### Recommendations

In each of the four sampling events there were no compounds detected in either wells OW-2 or OW-4 above their method detection limit. Detectable limits of semivolatiles have been found during past sampling events in both wells OW-1 and OW-3. Also volatiles have been detected in OW-3, in the past. The most recent (January 27, 1993) sample results, however, were all below detection limits for the analytes. ENSR would recommend, based on the results, that no further groundwater monitoring be required at this site.

If you agree with these recommendations, please indicate your agreement by signing the attached approval page provided and returning it to ENSR. Please call Caroline Ziegler in Dallas at (214) 960-6855 or Jim Baker in Houston at (713) 520-9900 with any questions. We look forward to your approval.

Sincerely,

  
Caroline Abbott Ziegler  
HOMCO Site Manager

  
Scott R. Laidlaw  
HOMCO Project Manager

CAZ/SRL/smb



April 2, 1993  
Mr. Roger C. Anderson  
Page 4

**APPROVAL PAGE**

Approval to cease monitoring the wells at HOMCO International, Inc., Site No. 135, in Hobbs, New Mexico.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

April 19, 1993

ANITA LOCKWOOD  
CABINET SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-338**

Mr. Robert J. Medler  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252

**RE: GROUND WATER MONITORING ASSESSMENT  
HOMCO INTERNATIONAL, INC HOBBS FACILITY**

Dear Mr. Medler:

The New Mexico Oil Conservation Division (OCD) has reviewed the April 2, 1993 "HOMCO INTERNATIONAL, INC. - SITE 135, HOBBS, NEW MEXICO, GROUNDWATER ASSESSMENT" which was submitted by ENSR Consulting and Engineering on behalf of HOMCO International, Inc. The correspondence requests elimination of all ground water monitoring of monitor wells OW-1, OW-2, OW-3 and OW-4 at the HOMCO Hobbs facility. This request is based upon the results of laboratory analyses of ground water samples taken since July of 1991. The OCD has required ground water monitoring as part of remedial activities associated with unlined pits at the site.

Based upon the information provided in the above referenced correspondence, the OCD does not require that HOMCO continue regular sampling of monitor wells at the site. However, contaminants related to HOMCO's disposal activities remain in the subsurface soils and have the potential to result in contamination of underlying fresh ground water. Therefore, the OCD requires that HOMCO sample all of the monitor wells for volatile aromatic hydrocarbons and semi-volatile organics prior to renewal of the facility discharge plan in 1996.

If you have any questions, please call me at (505) 827-5885.

Sincerely,

  
William C. Olson  
Hydrogeologist/Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor  
Caroline Abbott Ziegler, ENSR Consulting and Engineering



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
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ENSR Consulting  
and Engineering

12201 Merit Drive, Suite 900  
2 Forest Plaza  
Dallas, Texas 75251  
(214) 960-6855  
(214) 960-7140 (FAX)

April 2, 1993

Mr. Roger C. Anderson, Environmental Engineer  
State of New Mexico, Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RECEIVED

APR 12 1993

OIL CONSERVATION DIVISION  
SANTA FE

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Hobbs, New Mexico  
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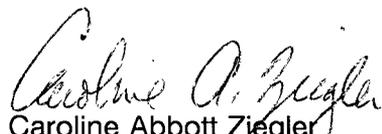
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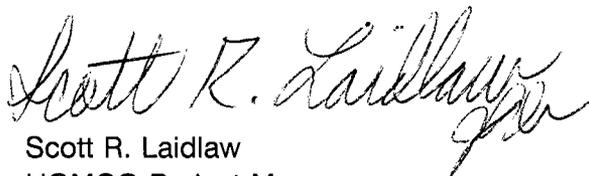
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Caroline Abbott Ziegler  
HOMCO Site Manager

  
Scott R. Laidlaw  
HOMCO Project Manager

CAZ/SRL/smb



April 2, 1993  
Mr. Roger C. Anderson  
Page 4

**APPROVAL PAGE**

Approval to cease monitoring the wells at HOMCO International, Inc., Site No. 135, in Hobbs, New Mexico.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title



**TABLE 2**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**

**EPA Method 524 Constituents**

<b>CONSTITUENT</b>	<b>DETECTION LIMIT (µg/L)</b>	<b>CONSTITUENT</b>	<b>DETECTION LIMIT (µg/L)</b>
<i>Benzene</i>	0.50	<i>1,3-Dichloropropane</i>	0.50
<i>Bromobenzene</i>	0.50	<i>2,2-Dichloropropane</i>	0.50
<i>Bromoform</i>	0.50	<i>1,1-Dichloropropene</i>	0.50
<i>Bromomethane</i>	0.50	<i>cis-1,3-Dichloropropene</i>	0.50
<i>n-Butylbenzene</i>	0.50	<i>trans-1,3-Dichloropropene</i>	0.50
<i>sec-Butylbenzene</i>	0.50	<i>Ethylbenzene</i>	0.50
<i>tert-Butylbenzene</i>	0.50	<i>Ethylene dibromide</i>	0.50
<i>Carbon tetrachloride</i>	0.50	<i>Hexachlorobutadiene</i>	0.50
<i>Chlorobenzene</i>	0.50	<i>Isopropylbenzene</i>	0.50
<i>Chlorobromomethane</i>	0.50	<i>p-Isopropyltoluene</i>	0.50
<i>Chlorodibromomethane</i>	0.50	<i>Methylene chloride</i>	0.50
<i>2-Chloroethylvinyl ether</i>	0.50	<i>Naphthalene</i>	0.50
<i>Chloroethane</i>	0.50	<i>n-Propylbenzene</i>	0.50
<i>Chloroform</i>	0.50	<i>Styrene</i>	0.50
<i>1-Chlorohexane</i>	0.50	<i>1,1,1,2-Tetrachloroethane</i>	0.50
<i>Chloromethane</i>	0.50	<i>1,1,2,2-Tetrachloroethane</i>	0.50
<i>2-Chlorotoluene</i>	0.50	<i>Tetrachloroethene</i>	0.50
<i>4-Chlorotoluene</i>	0.50	<i>Toluene</i>	0.50
<i>1,2-Dibromo-3-Chloropropane</i>	0.50	<i>1,2,3-Trichlorobenzene</i>	0.50
<i>1,2-Dibromoethane</i>	0.50	<i>1,2,4-Trichlorobenzene</i>	0.50
<i>Dibromomethane</i>	0.50	<i>1,1,1-Trichloroethane</i>	0.50
<i>Dichlorobromomethane</i>	0.50	<i>1,1,2-Trichloroethane</i>	0.50
<i>1,2-Dichlorobenzene</i>	0.50	<i>Trichloroethene</i>	0.50
<i>1,3-Dichlorobenzene</i>	0.50	<i>Trichlorofluoromethane</i>	0.50
<i>1,4-Dichlorobenzene</i>	0.50	<i>1,2,3-Trichloropropane</i>	0.50
<i>Dichlorodifluoromethane</i>	0.50	<i>1,2,4-Trimethylbenzene</i>	0.50
<i>1,1-Dichloroethane</i>	0.50	<i>1,3,5-Trimethylbenzene</i>	0.50
<i>1,2-Dichloroethane</i>	0.50	<i>Vinyl chloride</i>	0.50
<i>1,1-Dichloroethene</i>	0.50	<i>m-Xylene</i>	0.50
<i>cis-1,2-Dichloroethene</i>	0.50	<i>o-Xylene</i>	0.50
<i>trans-1,2-Dichloroethene</i>	0.50	<i>p-Xylene</i>	0.50
<i>1,2-Dichloropropane</i>	0.50	<i>Methyl-t-butyl ether</i>	0.50

**TABLE 3**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**

**EPA Method 525 Constituents**

<i>CONSTITUENT</i>	<i>DETECTION LIMIT (µg/L)</i>	<i>CONSTITUENT</i>	<i>DETECTION LIMIT (µg/L)</i>
<i>Acenaphthylene</i>	<i>0.1</i>	<i>Endrin</i>	<i>0.5</i>
<i>Aldrin</i>	<i>0.1</i>	<i>Fluorene</i>	<i>0.2</i>
<i>Anthracene</i>	<i>0.04</i>	<i>Heptachlor</i>	<i>0.04</i>
<i>Atrazine</i>	<i>0.1</i>	<i>Heptachlor epoxide</i>	<i>0.2</i>
<i>Benz(a)anthracene</i>	<i>0.04</i>	<i>2,2',3,3',4,4',6-heptachlorobiphenyl</i>	<i>0.1</i>
<i>Benzo(b)fluoranthene</i>	<i>0.2</i>	<i>Hexachlorobenzene</i>	<i>0.1</i>
<i>Benzo(K)fluoranthene</i>	<i>0.2</i>	<i>2,2',4,4',5,6'-hexachlorobiphenyl</i>	<i>0.1</i>
<i>Benzo(a)pyrene</i>	<i>0.04</i>	<i>Hexachlorocyclopentadiene</i>	<i>0.06</i>
<i>Benzo(g,h,i)perylene</i>	<i>0.1</i>	<i>Indeno(1,2,3,c,d)pyrene</i>	<i>0.1</i>
<i>Butylbenzylphthalate</i>	<i>0.3</i>	<i>Lindane</i>	<i>0.1</i>
<i>Alpha-chlordane</i>	<i>0.2</i>	<i>Methoxychlor</i>	<i>0.04</i>
<i>Gamma-chlordane</i>	<i>0.1</i>	<i>2,2',3,3',4,5',6,6'-octachlorobiphenyl</i>	<i>0.2</i>
<i>Trans-nonachlor</i>	<i>0.3</i>	<i>2,2',3',4,6-pentachlorobiphenyl</i>	<i>0.1</i>
<i>2-Chlorobiphenyl</i>	<i>0.1</i>	<i>Pentachlorophenol</i>	<i>0.3</i>
<i>Chrysene</i>	<i>0.04</i>	<i>Phenanthrene</i>	<i>0.01</i>
<i>Dibenz(a,h)anthracene</i>	<i>0.1</i>	<i>Pyrene</i>	<i>0.02</i>
<i>Di-n-butylphthalate</i>	<i>0.3</i>	<i>Simazene</i>	<i>0.2</i>
<i>2,3-Dichlorobiphenyl</i>	<i>0.1</i>	<i>2,2',4,4'-tetrachlorobiphenyl</i>	<i>0.1</i>
<i>Diethylphthalate</i>	<i>0.8</i>	<i>Toxaphene</i>	<i>5.0</i>
<i>Di(2-ethylhexyl)phthalate</i>	<i>0.6</i>	<i>2,4,5-trichlorobiphenyl</i>	<i>0.06</i>
<i>Di(2-ethylhexyl)adipate</i>	<i>0.6</i>	<i>Alachlor</i>	<i>0.16</i>
<i>Dimethylphthalate</i>	<i>0.04</i>		

**TABLE 4**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**

**EPA Method 625 Constituents**

CONSTITUENT		DETECTION LIMIT (µg/L)		CONSTITUENT		DETECTION LIMIT (µg/L)	
<b>ACID EXTRACTABLE ORGANICS</b>							
DATES		1-23-92	8-4-92	DATES		1-23-92	8-4-92
4-Chloro-3-methylphenol		3.8	3	2-Methylphenol		6.3	5
2-Chlorophenol		4.1	3.3	2-Nitrophenol		4.5	3.6
2,4-Dichlorophenol		3.4	2.7	4-Nitrophenol		3	2.4
2,4-Dimethylphenol		3.4	2.7	Pentachlorophenol		4.5	3.6
4,6-Dinitro-2-methylphenol		30	24	Phenol		1.9	1.5
2,4-Dinitrophenol		52.5	42	2,4,6-Trichlorophenol		3.4	2.7
<b>BASE-NEUTRAL EXTRACTABLE ORGANICS</b>							
Acenaphthene		2.4	1.9	1,2-Dichlorobenzene		2.4	1.9
Acenaphthylene		4.4	3.5	3,3'-Dichlorobenzidine		20.6	16.5
Anthracene		2.4	1.9	Diethylphthalate		2.4	1.9
Benzidine		55	44	Dimethylphthalate		2	1.6
Benzo(a)anthracene		9.8	7.8	2,4-Dinitrotoluene		7.1	5.7
Benzo(b)fluoranthene		6	4.8	2,6-Dinitrotoluene		2.4	1.9
Benzo(k)fluoranthene		3.1	2.5	Di-n-octylphthalate		3.1	2.5
Benzo(g,h,i)perylene		5.1	4.1	Fluoranthene		2.8	2.2
Benzo(a)pyrene		3.1	2.5	Fluorene		2.4	1.9
Bis(2-chloroethoxy)methane		6.6	5.3	Hexachlorobenzene		2.4	1.9
Bis(2-chloroethyl)ether		7.1	5.7	Hexachlorobutadiene		1.1	0.9
Bis(2-chloroisopropyl)ether		7.1	5.7	Hexachlorocyclopentadiene		6.3	5
Bis(2-ethylhexyl)phthalate		3.1	2.5	Hexachloroethane		2	1.6
4-Bromophenylphenyl ether		2.4	1.9	Indeno(1,2,3,c,d)pyrene		4.6	3.7
Butylbenzylphthalate		3.1	2.5	Isophorone		2.8	2.2
2-Chloronaphthalene		2.4	1.9	Naphthalene		2	1.6
4-Chlorophenylphenyl ether		5.3	4.2	Nitrobenzene		2.4	1.9
Chrysene		3.1	2.5	N-Nitrosodimethylamine		6.3	5
Dibenz(a,h)anthracene		3.1	2.5	N-Nitrosodiphenylamine		6.3	5
2,3,7,8-Tetrachlorodibenzodioxin		Negative		N-Nitrosodipropylamine		6.3	5
Di-n-butylphthalate		3.1	2.5	Phenanthrene		6.8	5.4
1,3-Dichlorobenzene		2.4	1.9	Pyrene		2.4	1.9
1,4-Dichlorobenzene		5.5	4.4	1,2,4-Trichlorobenzene		2.4	1.9

**TABLE 5**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**

**EPA Method 8270 Constituents**

CONSTITUENT	DETECTION LIMIT (µg/L)	CONSTITUENT	DETECTION LIMIT (µg/L)
<b>ACID EXTRACTABLE ORGANICS</b>			
<i>Phenol</i>	10	<i>4-Chloro-3-methylphenol</i>	20
<i>2-Chlorophenol</i>	10	<i>2,4,6-Trichlorophenol</i>	10
<i>2-Methylphenol</i>	10	<i>2,4,5-Trichlorophenol</i>	50
<i>4-Methylphenol</i>	10	<i>2,4-Dinitrophenol</i>	50
<i>2-Nitrophenol</i>	10	<i>4-Nitrophenol</i>	50
<i>2,4-Dimethylphenol</i>	10	<i>4,6-Dinitro-2-methylphenol</i>	50
<i>Benzoic Acid</i>	50	<i>Pentachlorophenol</i>	50
<i>2,4-Dichlorophenol</i>	10		
<b>BASE-NEUTRAL EXTRACTABLE ORGANICS</b>			
<i>Bis(2-chloroethyl)ether</i>	10	<i>2,4-Dinitrotoluene</i>	10
<i>1,3-Dichlorobenzene</i>	10	<i>Diethylphthalate</i>	10
<i>1,4-Dichlorobenzene</i>	10	<i>4-Chlorophenylphenyl ether</i>	10
<i>Benzyl alcohol</i>	20	<i>Fluorene</i>	10
<i>1,2-Dichlorobenzene</i>	10	<i>4-Nitroaniline</i>	50
<i>Bis(2-chloroisopropyl)ether</i>	10	<i>N-Nitrosodiphenylamine</i>	10
<i>N-Nitroso-Di-N-propylamine</i>	10	<i>4-Bromophenylphenyl ether</i>	10
<i>Hexachloroethane</i>	10	<i>Hexachlorobenzene</i>	10
<i>Nitrobenzene</i>	10	<i>Phenanthrene</i>	10
<i>Isophorone</i>	10	<i>Anthracene</i>	10
<i>Bis(2-chloroethoxy)methane</i>	10	<i>Di-n-butylphthalate</i>	10
<i>1,2,4-Trichlorobenzene</i>	10	<i>Fluoranthene</i>	10
<i>Naphthalene</i>	10	<i>Pyrene</i>	10
<i>4-Chloroaniline</i>	20	<i>Butylbenzylphthalate</i>	10
<i>Hexachlorobutadiene</i>	10	<i>3,3'-Dichlorobenzidine</i>	20
<i>2-Methylnaphthalene</i>	10	<i>Benzo(a)anthracene</i>	10
<i>Hexachlorocyclopentadiene</i>	10	<i>Chrysene</i>	10
<i>2-Chloronaphthalene</i>	10	<i>Bis(2-ethylhexyl)phthalate</i>	10
<i>2-Nitroaniline</i>	50	<i>Di-n-octylphthalate</i>	10
<i>Dimethylphthalate</i>	10	<i>Benzo(b)fluoranthene</i>	10
<i>Acenaphthylene</i>	10	<i>Benzo(k)fluoranthene</i>	10
<i>2,6-Dinitrotoluene</i>	10	<i>Benzo(a)pyrene</i>	10
<i>3-Nitroaniline</i>	50	<i>Indeno(1,2,3,c,d)pyrene</i>	10
<i>Acenaphthene</i>	10	<i>Dibenzo(a,h)anthracene</i>	10
<i>Dibenzofuran</i>	10	<i>Benzo(g,h,i)perylene</i>	10

**TABLE 6**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**  
**Analytical Results for OW-1**

ANALYTICAL PARAMETER	EPA METHOD	DATE/RESULTS	SAMPLE IDENTIFICATION	
			OW-1	OW-1(DUP)
VOLATILES	524	Date	7-18-91	
		Results	all BDL	
BTEX	8020	Date	1-23-92	
		Results	all BDL	
		Date	1-27-93	NA
		Results	all BDL	
SEMIVOLATILES	525	Date	7-18-91	
		Result	Benzo(a)pyrene 0.86µg/L Benzo(g,h,i)perylene 1.2µg/L Gamma chlordan 0.4µg/L Dibenz(a,h)anthracene 1.6µg/L Di(2-ethylhexyl)adipate 33.4µg/L Heptachlor 0.17µg/L 2,2',4,4',5,6'-Hexachlorobiphenyl 0.4µg/L Ideno(1,2,3,c,d)pyrene 1.0µg/L Methoxychlor 2.0µg/L Pyrene 0.76µg/L	Di(2-ethylhexyl)adipate 33.4µg/L
		Date	1-23-92	
		Result	Butylbenzylphthalate 3.6µg/L Di-n-butylphthalate 1.2µg/L Diethylphthalate 2.4µg/L Di(2-ethylhexyl)phthalate 21.2µg/L Di(2-ethylhexyl)adipate 2.2µg/L Dimethylphthalate 0.06µg/L Heptachlor epoxide 3.9µg/L Ideno(1,2,3,c,d)pyrene 0.1µg/L Lindane 0.1µg/L	NA
		Date	8-4-92	
		Result	all BDL	
	625	Date	1-23-92	
		Result	all BDL	
		Date	8-4-92	
		Result	Bis(2-ethylhexyl)phthalate 12.8µg/L Di-n-butylphthalate 3.7µg/L	NA
	8270	Date	1-27-93	
		Result	all BDL	
TPH	418.1	Date	7-18-91	
		Result	all BDL	

NA - Not Analyzed

BDL - Below Detection Limit

**TABLE 7**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**  
**Analytical Results for OW-2, OW-3, and OW-4**

ANALYTICAL PARAMETER	EPA METHOD	DATE/RESULTS	SAMPLE IDENTIFICATION		
			OW-2	OW-3	OW-4
VOLATILES	524	Date	7-18-91	7-18-91	7-18-91
		Results	all BDL	all BDL	all BDL
BTEX	8020	Date	1-23-92	1-23-92	1-23-92
		Results	all BDL	Benzene 5.0µg/L Xylenes 2.0µg/L	all BDL
		Date	1-27-93	1-27-93	1-27-93
		Results	all BDL	all BDL	all BDL
SEMIVOLATILES	525	Date	7-18-91	7-18-91	7-18-91
		Result	all BDL	Endrin 1.7µg/L	all BDL
	8270	Date	NA	1-27-93	NA
		Result		all BDL	
TPH	418.1	Date	7-18-91	7-18-91	7-18-91
		Result	all BDL	all BDL	all BDL

NA - Not Analyzed

BDL - Below Detection Limit

**TABLE 8**  
**HOMCO INTERNATIONAL, INC.**  
**HOBBS, NEW MEXICO - SITE NO. 135**  
**Analytical Results for Well Sample, Equipment Blanks, and Trip Blanks**

ANALYTICAL PARAMETER	EPA METHOD	DATE/RESULTS	SAMPLE IDENTIFICATION		
			WELL SAMPLE	EQUIPMENT BLANK	TRIP BLANK
VOLATILES	524	Date	7-18-91	7-18-91	7-18-91
		Results	all BDL	all BDL	all BDL
BTEX	8020	Date	NA	1-23-92	1-23-92
		Results		Toluene 1.8µg/L Xylenes 2.0µg/L	all BDL
		Date		1-27-93	1-27-93
		Results		all BDL	all BDL
SEMIVOLATILES	525	Date	7-18-91	7-18-91	7-18-91
		Result	all BDL	all BDL	all BDL
	8270	Date	NA	1-27-93	1-27-93
		Result		all BDL	all BDL
TPH	418.1	Date	7-18-91	NA	7-18-91
		Result	all BDL		all BDL

NA - Not Analyzed

BDL - Below Detection Limit

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

December 1, 1992

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

ANITA LOCKWOOD  
CABINET SECRETARY

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-313**

Mr. Robert J. Medler  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252

**RE: GROUND WATER MONITORING ASSESSMENT  
HOMCO INTERNATIONAL, INC HOBBS FACILITY**

Dear Mr. Medler:

The New Mexico Oil Conservation Division (OCD) has reviewed the November 10, 1992 "HOMCO INTERNATIONAL, INC. - SITE 135, HOBBS, NEW MEXICO, GROUNDWATER ASSESSMENT" submitted by ENSR Consulting and Engineering on behalf of Homco International, Inc. The correspondence requests elimination of monitor wells OW-2 and OW-4 from the monitoring requirements for the January 1993 sampling event.

The above referenced request is denied. As stated in OCD's October 29, 1992 letter to HOMCO "The OCD defers comment on elimination of monitor wells OW-2 and OW-4 from monitoring requirements until OCD reviews the results of water quality sampling to be performed in January of 1993".

If you have any questions, please call me at (505) 827-5885.

Sincerely,

A handwritten signature in cursive script that reads "William C. Olson".

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor  
Caroline Abbott Ziegler, ENSR Consulting and Engineering



OIL CONSERVATION DIVISION

RECEIVED

102 NO 15 609 28  
ENSR Consulting  
and Engineering

12201 Merit Drive, Suite 900

2 Forest Plaza

Dallas, Texas 75251

(214) 960-6855

(214) 960-7140 (FAX)

November 10, 1992

Mr. William C. Olson  
Hydrogeologist  
State of New Mexico  
Energy, Minerals, and Natural Resources Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RE: HOMCO International, Inc. - Site No. 135  
Hobbs, New Mexico  
Groundwater Monitoring Assessment

Dear Mr. Olson:

ENSR is pleased to submit the groundwater analytical results from the past two sampling events from wells OW-2 and OW-4 at the referenced site. The groundwater sampling was based on requirements and recommendations approved by your agency. ENSR believes that it is in the best interest of the State of New Mexico and our client to discontinue groundwater sampling at wells OW-2 and OW-4 because all analytes were below detection limits on the last two sampling events. We have attached the laboratory result data sheets concerning these events and we have summarized the analytical methods and sampling activities below.

July 18, 1991 - All four wells, a duplicate sample of well OW-1, the on-site water supply well, an equipment blank, and a trip blank were tested for the following parameters using listed methods:

- EPA 600/4-88/039:524 - Volatile Organics
- EPA 600/4-88/039:525 - Semivolatile Organics
- EPA 600/4-79/020:418.1 - Total Petroleum Hydrocarbons

During this sampling event, all analytes were below detection limits in OW-2 and OW-4.

January 23, 1992 - All four wells, a duplicate of well OW-1, an equipment blank, and a trip blank were sampled and analyzed for EPA 8020 - Benzene, Toluene, Ethylbenzene, and Xylene (BTEX). During this sampling event, all analytes were below detection limits in OW-2 and OW-4.

#### Recommendations

In each of these sampling events there were no compounds detected in either well OW-2 or OW-4 above their method detection limit. ENSR recommends, based on the analytical



November 10, 1992  
Mr. William C. Olson  
Page 2

results, that sampling requirements for these two wells be discontinued before the January 1993 sampling event at the site. Groundwater elevation measurements would still be taken for these two wells.

If you agree with this recommendation, please respond to Caroline Abbott Ziegler in Dallas at (214)960-6855 or Jim Baker at (713)520-9900. Please call with any questions. We look forward to your approval.

Sincerely,

  
Caroline Abbott Ziegler  
HOMCO Site Manager

  
Scott R. Laidlaw  
HOMCO Project Manager

Enclosures

DRM/CAZ



# NDRC LABORATORIES, INC.

A member of the Inhcpe Environmental Group

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BEAUMONT

DALLAS

HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-6

REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW2  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 18-JUL-1991  
ANALYSIS METHOD : EPA 524

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	0.50 µg/L	< 0.50 µg/L
Bromobenzene	0.50 µg/L	< 0.50 µg/L
Bromoform	0.50 µg/L	< 0.50 µg/L
Bromomethane	0.50 µg/L	< 0.50 µg/L
n-Butylbenzene	0.50 µg/L	< 0.50 µg/L
sec-Butylbenzene	0.50 µg/L	< 0.50 µg/L
tert-Butylbenzene	0.50 µg/L	< 0.50 µg/L
Carbon tetrachloride	0.50 µg/L	< 0.50 µg/L
Chlorobenzene	0.50 µg/L	< 0.50 µg/L
Chlorobromomethane	0.50 µg/L	< 0.50 µg/L
Chlorodibromomethane	0.50 µg/L	< 0.50 µg/L
2-Chloroethylvinyl ether	0.50 µg/L	< 0.50 µg/L
Chloroethane	0.50 µg/L	< 0.50 µg/L
Chloroform	0.50 µg/L	< 0.50 µg/L
1-Chlorohexane	0.50 µg/L	< 0.50 µg/L
Chloromethane	0.50 µg/L	< 0.50 µg/L
2-Chlorotoluene	0.50 µg/L	< 0.50 µg/L
4-Chlorotoluene	0.50 µg/L	< 0.50 µg/L
1,2-Dibromo-3-Chloropropane	0.50 µg/L	< 0.50 µg/L

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HOUSTON

REPORT NUMBER : H91-2063-6  
ANALYSIS METHOD : EPA 524

PAGE 2

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
1,2-Dibromoethane	0.50 µg/L	< 0.50 µg/L
Dibromomethane	0.50 µg/L	< 0.50 µg/L
Dichlorobromomethane	0.50 µg/L	< 0.50 µg/L
1,2-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,3-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,4-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
Dichlorodifluoromethane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloroethane	0.50 µg/L	< 0.50 µg/L
1,2-Dichloroethane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloroethene	0.50 µg/L	< 0.50 µg/L
cis-1,2-Dichloroethene	0.50 µg/L	< 0.50 µg/L
trans-1,2-Dichloroethene	0.50 µg/L	< 0.50 µg/L
1,2-Dichloropropane	0.50 µg/L	< 0.50 µg/L
1,3-Dichloropropane	0.50 µg/L	< 0.50 µg/L
2,2-Dichloropropane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloropropene	0.50 µg/L	< 0.50 µg/L
cis-1,3-Dichloropropene	0.50 µg/L	< 0.50 µg/L
trans-1,3-Dichloropropene	0.50 µg/L	< 0.50 µg/L
Ethylbenzene	0.50 µg/L	< 0.50 µg/L
Ethylene dibromide	0.50 µg/L	< 0.50 µg/L
Hexachlorobutadiene	0.50 µg/L	< 0.50 µg/L
Isopropylbenzene	0.50 µg/L	< 0.50 µg/L
p-Isopropyltoluene	0.50 µg/L	< 0.50 µg/L
Methylene chloride	0.50 µg/L	< 0.50 µg/L
Naphthalene	0.50 µg/L	< 0.50 µg/L
n-Propylbenzene	0.50 µg/L	< 0.50 µg/L

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HOUSTON

REPORT NUMBER : H91-2063-6  
ANALYSIS METHOD : EPA 524

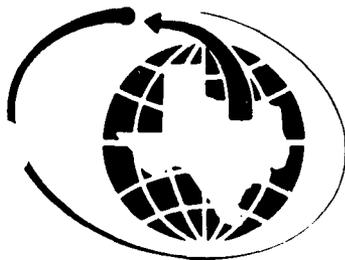
PAGE 3

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	0.50 µg/L	< 0.50 µg/L
1,1,1,2-Tetrachloroethane	0.50 µg/L	< 0.50 µg/L
1,1,2,2-Tetrachloroethane	0.50 µg/L	< 0.50 µg/L
Tetrachloroethene	0.50 µg/L	< 0.50 µg/L
Toluene	0.50 µg/L	< 0.50 µg/L
1,2,3-Trichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,2,4-Trichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,1,1-Trichloroethane	0.50 µg/L	< 0.50 µg/L
1,1,2-Trichloroethane	0.50 µg/L	< 0.50 µg/L
Trichloroethene	0.50 µg/L	< 0.50 µg/L
Trichlorofluoromethane	0.50 µg/L	< 0.50 µg/L
1,2,3-Trichloropropane	0.50 µg/L	< 0.50 µg/L
1,2,4-Trimethylbenzene	0.50 µg/L	< 0.50 µg/L
1,3,5-Trimethylbenzene	0.50 µg/L	< 0.50 µg/L
Vinyl chloride	0.50 µg/L	< 0.50 µg/L
m-Xylene	0.50 µg/L	< 0.50 µg/L
o-Xylene	0.50 µg/L	< 0.50 µg/L
p-Xylene	0.50 µg/L	< 0.50 µg/L
Methyl-t-butyl ether		< 0.50 µg/L

NDRC Laboratories, Inc.

David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013304



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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-6  
REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW2  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 18-JUL-1991  
ANALYSIS METHOD : EPA 525

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthylene	0.1 µg/L	< 0.1 µg/L
Aldrin	0.1 µg/L	< 0.1 µg/L
Anthracene	0.04 µg/L	< 0.04 µg/L
Atrazine	0.1 µg/L	< 0.1 µg/L
Benz(a)anthracene	0.04 µg/L	< 0.04 µg/L
Benzo(b)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(K)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(a)pyrene	0.04 µg/L	< 0.04 µg/L
Benzo(g,h,i)perylene	0.1 µg/L	< 0.1 µg/L
Butylbenzylphthalate	0.3 µg/L	< 0.3 µg/L
Alpha-chlordane	0.2 µg/L	< 0.2 µg/L
Gamma-chlordane	0.1 µg/L	< 0.1 µg/L
Trans-nonachlor	0.3 µg/L	< 0.3 µg/L
2-Chlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Chrysene	0.04 µg/L	< 0.04 µg/L
Dibenz(a,h)anthracene	0.1 µg/L	< 0.1 µg/L
Di-n-butylphthalate	0.3 µg/L	< 0.3 µg/L
2,3-Dichlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Diethylphthalate	0.8 µg/L	< 0.8 µg/L

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REPORT NUMBER : H91-2063-6  
ANALYSIS METHOD : EPA 525

PAGE 2

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Di(2-ethylhexyl)phthalate	0.6 µg/L	< 0.6 µg/L
Di(2-ethylhexyl)adipate	0.6 µg/L	< 0.6 µg/L
Dimethylphthalate	0.04 µg/L	< 0.04 µg/L
Endrin	0.5 µg/L	< 0.5 µg/L
Fluorene	0.2 µg/L	< 0.2 µg/L
Heptachlor	0.04 µg/L	< 0.04 µg/L
Heptachlor epoxide	0.2 µg/L	< 0.2 µg/L
2,2',3,3',4,4',6-heptachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Hexachlorobenzene	0.1 µg/L	< 0.1 µg/L
2,2',4,4',5,6'-hexachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Hexachlorocyclopentadiene	0.06 µg/L	< 0.06 µg/L
Indeno(1,2,3,c,d)pyrene	0.1 µg/L	< 0.1 µg/L
Lindane	0.1 µg/L	< 0.1 µg/L
Methoxychlor	0.04 µg/L	< 0.04 µg/L
2,2',3,3',4,5',6,6'-octachlorobiphenyl	0.2 µg/L	< 0.2 µg/L
2,2',3',4,6-pentachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Pentachlorophenol	0.3 µg/L	< 0.3 µg/L
Phenanthrene	0.01 µg/L	< 0.01 µg/L
Pyrene	0.02 µg/L	< 0.02 µg/L
Simazine	0.2 µg/L	< 0.2 µg/L
2,2',4,4'-tetrachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Toxaphene	5.0 µg/L	< 5.0 µg/L
2,4,5-trichlorobiphenyl	0.06 µg/L	< 0.06 µg/L
Alachlor	0.16 µg/L	< 0.16 µg/L

NDRC Laboratories, Inc.

David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013306



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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-6  
REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW2  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 18-JUL-1991

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 µg/L

NDRC Laboratories, Inc.

David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013307





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HOUSTON

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SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW2  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 18-JUL-1991  
ANALYSIS METHOD : EPA 418.1

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	1.0 mg/L	< 1.0 mg/L

NDRC Laboratories, Inc.

*David R. Godwin*  
David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013309



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DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-8

REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER

ID MARKS : OW4

: Proj:3519-010-235/Homco 135

DATE SAMPLED : 17-JUL-1991

ANALYSIS METHOD : EPA 524

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	0.50 µg/L	< 0.50 µg/L
Bromobenzene	0.50 µg/L	< 0.50 µg/L
Bromoform	0.50 µg/L	< 0.50 µg/L
Bromomethane	0.50 µg/L	< 0.50 µg/L
n-Butylbenzene	0.50 µg/L	< 0.50 µg/L
sec-Butylbenzene	0.50 µg/L	< 0.50 µg/L
tert-Butylbenzene	0.50 µg/L	< 0.50 µg/L
Carbon tetrachloride	0.50 µg/L	< 0.50 µg/L
Chlorobenzene	0.50 µg/L	< 0.50 µg/L
Chlorobromomethane	0.50 µg/L	< 0.50 µg/L
Chlorodibromomethane	0.50 µg/L	< 0.50 µg/L
2-Chloroethylvinyl ether	0.50 µg/L	< 0.50 µg/L
Chloroethane	0.50 µg/L	< 0.50 µg/L
Chloroform	0.50 µg/L	< 0.50 µg/L
1-Chlorohexane	0.50 µg/L	< 0.50 µg/L
Chloromethane	0.50 µg/L	< 0.50 µg/L
2-Chlorotoluene	0.50 µg/L	< 0.50 µg/L
4-Chlorotoluene	0.50 µg/L	< 0.50 µg/L
1,2-Dibromo-3-Chloropropane	0.50 µg/L	< 0.50 µg/L

EN135013318



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HOUSTON

REPORT NUMBER : H91-2063-8  
ANALYSIS METHOD : EPA 524

PAGE 2

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
1,2-Dibromoethane	0.50 µg/L	< 0.50 µg/L
Dibromomethane	0.50 µg/L	< 0.50 µg/L
Dichlorobromomethane	0.50 µg/L	< 0.50 µg/L
1,2-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,3-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,4-Dichlorobenzene	0.50 µg/L	< 0.50 µg/L
Dichlorodifluoromethane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloroethane	0.50 µg/L	< 0.50 µg/L
1,2-Dichloroethane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloroethene	0.50 µg/L	< 0.50 µg/L
cis-1,2-Dichloroethene	0.50 µg/L	< 0.50 µg/L
trans-1,2-Dichloroethene	0.50 µg/L	< 0.50 µg/L
1,2-Dichloropropane	0.50 µg/L	< 0.50 µg/L
1,3-Dichloropropane	0.50 µg/L	< 0.50 µg/L
2,2-Dichloropropane	0.50 µg/L	< 0.50 µg/L
1,1-Dichloropropene	0.50 µg/L	< 0.50 µg/L
cis-1,3-Dichloropropene	0.50 µg/L	< 0.50 µg/L
trans-1,3-Dichloropropene	0.50 µg/L	< 0.50 µg/L
Ethylbenzene	0.50 µg/L	< 0.50 µg/L
Ethylene dibromide	0.50 µg/L	< 0.50 µg/L
Hexachlorobutadiene	0.50 µg/L	< 0.50 µg/L
Isopropylbenzene	0.50 µg/L	< 0.50 µg/L
p-Isopropyl toluene	0.50 µg/L	< 0.50 µg/L
Methylene chloride	0.50 µg/L	< 0.50 µg/L
Naphthalene	0.50 µg/L	< 0.50 µg/L
n-Propylbenzene	0.50 µg/L	< 0.50 µg/L

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HOUSTON

REPORT NUMBER : H91-2063-8  
ANALYSIS METHOD : EPA 524

PAGE 3

VOLATILE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Styrene	0.50 µg/L	< 0.50 µg/L
1,1,1,2-Tetrachloroethane	0.50 µg/L	< 0.50 µg/L
1,1,2,2-Tetrachloroethane	0.50 µg/L	< 0.50 µg/L
Tetrachloroethene	0.50 µg/L	< 0.50 µg/L
Toluene	0.50 µg/L	< 0.50 µg/L
1,2,3-Trichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,2,4-Trichlorobenzene	0.50 µg/L	< 0.50 µg/L
1,1,1-Trichloroethane	0.50 µg/L	< 0.50 µg/L
1,1,2-Trichloroethane	0.50 µg/L	< 0.50 µg/L
Trichloroethene	0.50 µg/L	< 0.50 µg/L
Trichlorofluoromethane	0.50 µg/L	< 0.50 µg/L
1,2,3-Trichloropropane	0.50 µg/L	< 0.50 µg/L
1,2,4-Trimethylbenzene	0.50 µg/L	< 0.50 µg/L
1,3,5-Trimethylbenzene	0.50 µg/L	< 0.50 µg/L
Vinyl chloride	0.50 µg/L	< 0.50 µg/L
m-Xylene	0.50 µg/L	< 0.50 µg/L
o-Xylene	0.50 µg/L	< 0.50 µg/L
p-Xylene	0.50 µg/L	< 0.50 µg/L
Methyl-t-butyl ether		< 0.50 µg/L

NDRC Laboratories, Inc.

David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013320



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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-8

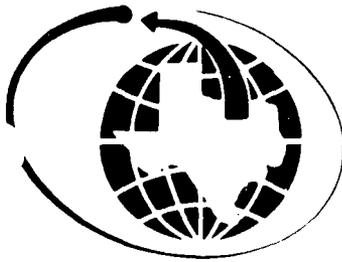
REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW4  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 17-JUL-1991  
ANALYSIS METHOD : EPA 525

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthylene	0.1 µg/L	< 0.1 µg/L
Aldrin	0.1 µg/L	< 0.1 µg/L
Anthracene	0.04 µg/L	< 0.04 µg/L
Atrazine	0.1 µg/L	< 0.1 µg/L
Benz(a)anthracene	0.04 µg/L	< 0.04 µg/L
Benzo(b)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(K)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(a)pyrene	0.04 µg/L	< 0.04 µg/L
Benzo(g,h,i)perylene	0.1 µg/L	< 0.1 µg/L
Butylbenzylphthalate	0.3 µg/L	< 0.3 µg/L
Alpha-chlordane	0.2 µg/L	< 0.2 µg/L
Gamma-chlordane	0.1 µg/L	< 0.1 µg/L
Trans-nonachlor	0.3 µg/L	< 0.3 µg/L
2-Chlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Chrysene	0.04 µg/L	< 0.04 µg/L
Dibenz(a,h)anthracene	0.1 µg/L	< 0.1 µg/L
Di-n-butylphthalate	0.3 µg/L	< 0.3 µg/L
2,3-Dichlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Diethylphthalate	0.8 µg/L	< 0.8 µg/L

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REPORT NUMBER : H91-2063-8  
ANALYSIS METHOD : EPA 525

PAGE 2

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Di(2-ethylhexyl)phthalate	0.6 µg/L	< 0.6 µg/L
Di(2-ethylhexyl)adipate	0.6 µg/L	< 0.6 µg/L
Dimethylphthalate	0.04 µg/L	< 0.04 µg/L
Endrin	0.5 µg/L	< 0.5 µg/L
Fluorene	0.2 µg/L	< 0.2 µg/L
Heptachlor	0.04 µg/L	< 0.04 µg/L
Heptachlor epoxide	0.2 µg/L	< 0.2 µg/L
2,2',3,3',4,4',6-heptachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Hexachlorobenzene	0.1 µg/L	< 0.1 µg/L
2,2',4,4',5,6'-hexachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Hexachlorocyclopentadiene	0.06 µg/L	< 0.06 µg/L
Indeno(1,2,3,c,d)pyrene	0.1 µg/L	< 0.1 µg/L
Lindane	0.1 µg/L	< 0.1 µg/L
Methoxychlor	0.04 µg/L	< 0.04 µg/L
2,2',3,3',4,5',6,6'-octachlorobiphenyl	0.2 µg/L	< 0.2 µg/L
2,2',3',4,6-pentachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Pentachlorophenol	0.3 µg/L	< 0.3 µg/L
Phenanthrene	0.01 µg/L	< 0.01 µg/L
Pyrene	0.02 µg/L	< 0.02 µg/L
Simazine	0.2 µg/L	< 0.2 µg/L
2,2',4,4'-tetrachlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Toxaphene	5.0 µg/L	< 5.0 µg/L
2,4,5-trichlorobiphenyl	0.06 µg/L	< 0.06 µg/L
Alachlor	0.16 µg/L	< 0.16 µg/L

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*David R. Godwin (Signature)*  
David R. Godwin, Ph.D.  
Chief Executive Officer

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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-8

REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW4  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 17-JUL-1991

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		VOA	10 µg/L

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*David R. Godwin*  
David R. Godwin, Ph.D.  
Chief Executive Officer

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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-8

REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
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ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW4  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 17-JUL-1991

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected above		ABN	10 µg/L

NDRC Laboratories, Inc.

*David R. Godwin*  
David R. Godwin, Ph.D.  
Chief Executive Officer

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HOUSTON

DATE RECEIVED : 19-JUL-1991

REPORT NUMBER : H91-2063-8

REPORT DATE : 28-AUG-1991

SAMPLE SUBMITTED BY : ENSR Consulting & Engineering  
ADDRESS : 3000 Richmond Avenue  
: Houston, TX 77098  
ATTENTION : Mr. Dave Dorrance

SAMPLE MATRIX : WATER  
ID MARKS : OW4  
: Proj:3519-010-235/Homco 135  
DATE SAMPLED : 17-JUL-1991  
ANALYSIS METHOD : EPA 418.1

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Total Petroleum Hydrocarbon	1.0 mg/L	< 1.0 mg/L

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*David R. Godwin*  
David R. Godwin, Ph.D.  
Chief Executive Officer

EN135013325



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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-2

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : OW-4  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992  
ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 µg/L	< 1.0 µg/L
Toluene	1.0 µg/L	< 1.0 µg/L
Ethyl benzene	1.0 µg/L	< 1.0 µg/L
Xylenes	1.0 µg/L	< 1.0 µg/L

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 µg/L	100 %

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Chief Executive Officer



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DALLAS

HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-1

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-2

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	98.0 %

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*David R. Godwin v 2*  
\_\_\_\_\_  
David R. Godwin, Ph.D.  
Chief Executive Officer



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DALLAS

HOUSTON

DATE RECEIVED: 24-JAN-1992

REPORT NUMBER: D92-697

REPORT DATE: 13-FEB-1992

SUBMITTED BY: ENSR Consulting And Engineering

## LABORATORY ANALYSIS QUALITY CONTROL REPORT

ANALYSIS: Benzene  
Technician: FJP  
Extraction Date: 1/24/92  
Date Analyzed: 1/24/92  
QC Date: 1/24/92  
QC Sample Number: D92-582-1

Analysis Method: EPA 8020  
Extraction Method: EPA 5030  
MS/MSD RPD: 25 %  
Average Spike Recovery: 102 %  
Duplicate RPD: ----  
Method Blank: <1.0 µg/L  
Blank Spike Recovery: 102 %

ANALYSIS: Ethyl Benzene  
Technician: FJP  
Extraction Date: 1/24/92  
Date Analyzed: 1/24/92  
QC Date: 1/24/92  
QC Sample Number: D92-582-1

Analysis Method: EPA 8020  
Extraction Method: EPA 5030  
MS/MSD RPD: 24 %  
Average Spike Recovery: 97.3 %  
Duplicate RPD: ----  
Method Blank: <1.0 µg/L  
Blank Spike Recovery: 86.6 %



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

October 29, 1992

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

ANITA LOCKWOOD  
CABINET SECRETARY

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-667-242-307**

Mr. Robert J. Medler  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252

**RE: GROUND WATER MONITORING ASSESSMENT  
HOMCO INTERNATIONAL, INC HOBBS FACILITY**

Dear Mr. Medler:

The New Mexico Oil Conservation Division (OCD) has completed a review of the September 17, 1992 "HOMCO INTERNATIONAL, INC. - SITE 135, HOBBS, NEW MEXICO, GROUNDWATER ASSESSMENT" submitted by ENSR Consulting and Engineering on behalf of Homco International, Inc. The correspondence requests a change in the laboratory methods used to analyze ground water from monitor wells and requests elimination of monitor wells OW-2 and OW-4 from the monitoring requirements.

The OCD approves of the recommendation to change the laboratory analytical methods contained in the above referenced report. The OCD defers comment on elimination of monitor wells OW-2 and OW-4 from monitoring requirements until OCD reviews the results of water quality sampling to be performed in January of 1993.

If you have any questions, please call me at (505) 827-5885.

Sincerely,

William C. Olson  
Hydrogeologist  
Environmental Bureau

xc: Jerry Sexton, OCD Hobbs District Supervisor

ENSR

OIL CONSERVATION DIVISION  
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ENSR Consulting  
and Engineering

12201 Merit Drive, Suite 900  
2 Forest Plaza  
Dallas, Texas 75251  
(214) 960-6855  
(214) 960-7140 (FAX)

October 23, 1992

'92 OCT 26 AM 9 43

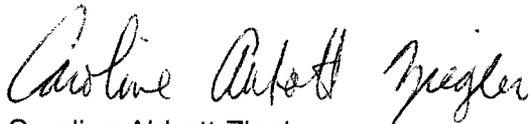
Mr. William C. Olson  
State of New Mexico  
Oil Conservation Division  
Land Office Building  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

RE: Original Sample Analysis Data from the July 1992 Sampling at HOMCO International, Inc. in Hobbs, New Mexico

Dear Mr. Olson:

Enclosed for your review, and per your request of October 22, is the sample data from the latest round of sampling at the referenced facility. Please call Caroline at (214) 960-6855 if you should have any questions regarding these results. Thank you for your attention.

Sincerely,



Caroline Abbott Ziegler  
Project Manager

Enclosure



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HOUSTON

DATE RECEIVED : 5-AUG-1992

REPORT NUMBER : D92-8467-1

REPORT DATE : 21-AUG-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Mr. Todd Boring

SAMPLE MATRIX : Water  
ID MARKS : OW-1  
: Hobbs, NM  
PROJECT : 3519-010-235 Homco Intrn.  
DATE SAMPLED : 4-AUG-1992  
ANALYSIS METHOD : EPA 525

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthylene	0.1 µg/L	< 0.1 µg/L
Aldrin	0.1 µg/L	< 0.1 µg/L
Anthracene	0.04 µg/L	< 0.04 µg/L
Atrazine	0.1 µg/L	< 0.1 µg/L
Benz(a)anthracene	0.04 µg/L	< 0.04 µg/L
Benzo(b)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(k)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(a)pyrene	0.04 µg/L	< 0.04 µg/L
Benzo(g,h,i)perylene	0.1 µg/L	< 0.1 µg/L
Butylbenzylphthalate	0.3 µg/L	< 0.3 µg/L
Alpha-chlordane	0.2 µg/L	< 0.2 µg/L
Gamma-chlordane	0.1 µg/L	< 0.1 µg/L
Trans nonachlor	0.3 ug/L	< 0.3 ug/L
2-Chlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Chrysene	0.04 ug/L	< 0.04 ug/L
Dibenz(a,h)anthracene	0.1 ug/L	< 0.1 ug/L
Di-n-butylphthalate	0.3 ug/L	< 0.3 ug/L
2,3-dichlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Diethylphthalate	0.8 ug/L	< 0.8 ug/L



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HOUSTON

REPORT NUMBER : D92-8467-1  
ANALYSIS METHOD : EPA 525

PAGE 2

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Di(2-ethylhexyl)phthalate	0.6 ug/L	< 0.6 ug/L
Di(2-ethylhexyl)adipate	0.6 ug/L	< 0.6 ug/L
Dimethylphthalate	0.04 ug/L	< 0.04 ug/L
Endrin	0.5 ug/L	< 0.5 ug/L
Fluorene	0.2 ug/L	< 0.2 ug/L
Heptachlor	0.04 ug/L	< 0.04 ug/L
Heptachlor epoxide	0.2 ug/L	< 0.2 ug/L
2,2',3,3',4,4',6-hepta-chlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Hexachlorobenzene	0.1 ug/L	< 0.1 ug/L
2,2',4,4',5,6'-hexachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Hexachlorocyclopentadiene	0.06 ug/L	< 0.06 ug/L
Indeno(1,2,3,c,d)pyrene	0.1 ug/L	< 0.1 ug/L
Lindane	0.1 ug/L	< 0.1 ug/L
Methoxychlor	0.04 ug/L	< 0.04 ug/L
2,2',3,3',4,5',6,6'-octachlorobiphenyl	0.2 ug/L	< 0.2 ug/L
2,2',3',4,6-pentachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Pentachlorophenol	0.3 ug/L	< 0.3 ug/L
Phenanthrene	0.01 ug/L	< 0.01 ug/L
Pyrene	0.02 ug/L	< 0.02 ug/L
Simazine	0.2 ug/L	< 0.2 ug/L
2,2',4,4'-tetrachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Toxaphene	5.0 ug/L	< 5.0 ug/L
2,4,5-trichlorobiphenyl	0.06 ug/L	< 0.06 ug/L
Alachlor	0.16 ug/L	< 0.16 ug/L



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HOUSTON

REPORT NUMBER : D92-8467-1  
ANALYSIS METHOD : EPA 525

PAGE 3

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Perylene-D12 (SS)	100.0 $\mu\text{g/L}$	< 32.0 %

NDRC Laboratories, Inc.

*David R. Godwin v 2*  
\_\_\_\_\_  
David R. Godwin, Ph.D.  
Chief Executive Officer



# NDRC LABORATORIES, INC.

A member of Inchcape Environmental

1089 East Collins Blvd., Richardson, Texas 75081 • (214) 238-5591 • FAX (214) 238-5592

BEAUMONT

DALLAS

HOUSTON

DATE RECEIVED : 5-AUG-1992

REPORT NUMBER : D92-8467-1

REPORT DATE : 21-AUG-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Mr. Todd Boring

SAMPLE MATRIX : Water

ID MARKS : OW-1

: Hobbs, NM

PROJECT : 3519-010-235 Homco Intrn.

DATE SAMPLED : 4-AUG-1992

ANALYSIS METHOD : EPA 625

ACID EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
4-Chloro-3-methylphenol	3.0 µg/L	< 3.0 µg/L
2-Chlorophenol	3.3 µg/L	< 3.3 µg/L
2,4-Dichlorophenol	2.7 µg/L	< 2.7 µg/L
2,4-Dimethylphenol	2.7 µg/L	< 2.7 µg/L
4,6-Dinitro-2-methylphenol	24.0 µg/L	< 24.0 µg/L
2,4-Dinitrophenol	42.0 µg/L	< 42.0 µg/L
2-Methylphenol	5.0 µg/L	< 5.0 µg/L
2-Nitrophenol	3.6 µg/L	< 3.6 µg/L
4-Nitrophenol	2.4 µg/L	< 2.4 µg/L
Pentachlorophenol	3.6 µg/L	< 3.6 µg/L
Phenol	1.5 µg/L	< 1.5 µg/L
2,4,6-Trichlorophenol	2.7 µg/L	< 2.7 µg/L



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REPORT NUMBER : D92-8467-1  
ANALYSIS METHOD : EPA 625

PAGE 2

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Phenol-d5 (SS)	100 $\mu\text{g/L}$	37.7 %
2-Fluorophenol (SS)	100 $\mu\text{g/L}$	43.3 %
2,4,6-Tribromophenol (SS)	100 $\mu\text{g/L}$	79.0 %

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SAMPLE MATRIX : Water

ID MARKS : OW-1

: Hobbs, NM

PROJECT : 3519-010-235 Homco Intrn.

DATE SAMPLED : 4-AUG-1992

ANALYSIS METHOD : EPA 625

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	1.9 µg/L	< 1.9 µg/L
Acenaphthylene	3.5 µg/L	< 3.5 µg/L
Anthracene	1.9 µg/L	< 1.9 µg/L
Benzidine	44.0 µg/L	< 44.0 µg/L
Benzo(a)anthracene	7.8 µg/L	< 7.8 µg/L
Benzo(b)fluoranthene	4.8 µg/L	< 4.8 µg/L
Benzo(k)fluoranthene	2.5 µg/L	< 2.5 µg/L
Benzo(g,h,i)perylene	4.1 µg/L	< 4.1 µg/L
Benzo(a)pyrene	2.5 µg/L	< 2.5 µg/L
Bis(2-chloroethoxy)methane	5.3 µg/L	< 5.3 µg/L
Bis(2-chloroethyl)ether	5.7 µg/L	< 5.7 µg/L
Bis(2-chloroisopropyl)ether	5.7 µg/L	< 5.7 µg/L
Bis(2-ethylhexyl)phthalate	2.5 µg/L	12.8 µg/L
4-Bromophenylphenyl ether	1.9 µg/L	< 1.9 µg/L
Butyl benzyl phthalate	2.5 µg/L	< 2.5 µg/L
2-Chloronaphthalene	1.9 µg/L	< 1.9 µg/L
4-Chlorophenylphenyl ether	4.2 µg/L	< 4.2 µg/L
Chrysene	2.5 µg/L	< 2.5 µg/L
Dibenz(a,h)anthracene	2.5 µg/L	< 2.5 µg/L



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HOUSTON

REPORT NUMBER : D92-8467-1  
ANALYSIS METHOD : EPA 625

PAGE 2

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2,3,7,8-Tetrachlorodibenzodioxin		Negative
Di-n-butylphthalate	2.5 µg/L	3.7 µg/L
1,3-Dichlorobenzene	1.9 µg/L	< 1.9 µg/L
1,4-Dichlorobenzene	4.4 µg/L	< 4.4 µg/L
1,2-Dichlorobenzene	1.9 µg/L	< 1.9 µg/L
3,3'-Dichlorobenzidine	16.5 µg/L	< 16.5 µg/L
Diethylphthalate	1.9 µg/L	< 1.9 µg/L
Dimethylphthalate	1.6 µg/L	< 1.6 µg/L
2,4-Dinitrotoluene	5.7 µg/L	< 5.7 µg/L
2,6-Dinitrotoluene	1.9 µg/L	< 1.9 µg/L
Di-n-octylphthalate	2.5 µg/L	< 2.5 µg/L
Fluoranthene	2.2 µg/L	< 2.2 µg/L
Fluorene	1.9 µg/L	< 1.9 µg/L
Hexachlorobenzene	1.9 µg/L	< 1.9 µg/L
Hexachlorobutadiene	0.9 µg/L	< 0.9 µg/L
Hexachlorocyclopentadiene	5.0 µg/L	< 5.0 µg/L
Hexachloroethane	1.6 µg/L	< 1.6 µg/L
Indeno(1,2,3-cd)pyrene	3.7 µg/L	< 3.7 µg/L
Isophorone	2.2 µg/L	< 2.2 µg/L
Naphthalene	1.6 µg/L	< 1.6 µg/L
Nitrobenzene	1.9 µg/L	< 1.9 µg/L
N-Nitrosodimethylamine	5.0 µg/L	< 5.0 µg/L
N-Nitrosodiphenylamine	5.0 µg/L	< 5.0 µg/L
N-Nitrosodipropylamine	5.0 µg/L	< 5.0 µg/L
Phenanthrene	5.4 µg/L	< 5.4 µg/L
Pyrene	1.9 µg/L	< 1.9 µg/L



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HOUSTON

REPORT NUMBER : D92-8467-1  
ANALYSIS METHOD : EPA 625

PAGE 3

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
1,2,4-Trichlorobenzene	1.9 $\mu\text{g/L}$	< 1.9 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Nitrobenzene-d5( SS )	50.0 $\mu\text{g/L}$	77.5 %
2-Fluorobiphenyl( SS )	50.0 $\mu\text{g/L}$	86.3 %
Terphenyl-d14 (SS)	50.0 $\mu\text{g/L}$	104 %

NDRC Laboratories, Inc.

*David R. Godwin* ✓ 2  
David R. Godwin, Ph.D.  
Chief Executive Officer



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DALLAS

HOUSTON

DATE RECEIVED : 5-AUG-1992

REPORT NUMBER : D92-8467-1

REPORT DATE : 21-AUG-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Mr. Todd Boring

SAMPLE MATRIX : Water

ID MARKS : OW-1

: Hobbs, NM

PROJECT : 3519-010-235 Homco Intrn.

DATE SAMPLED : 4-AUG-1992

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected		ABN	10 $\mu$ g/L

NDRC Laboratories, Inc.

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David R. Godwin, Ph.D.  
Chief Executive Officer

D92 - 8467

30

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: New CLP Forms

Contract: 08/14/92

Lab Code: HP005

Case No.: AD-76

SAS No.: 08/10/9

SDG No.: 08/11/9

Matrix Spike - EPA Sample No.: BNA REAGENT WATER MS/MSD

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100.00	0.00	66.00	66	12- 89
2-Chlorophenol	100.00	0.00	67.00	67	27-123
1,4-Dichlorobenzene	50.00	0.00	39.00	77	36- 97
N-Nitroso-di-n-prop.(1)	50.00	0.00	45.00	89	41-116
1,2,4-Trichlorobenzene	50.00	0.00	38.00	76	39- 98
4-Chloro-3-methylphenol	100.00	0.00	70.00	70	23- 97
Acenaphthene	50.00	0.00	36.00	71	46-118
4-Nitrophenol	100.00	0.00	76.00	76	10- 80
2,4-Dinitrotoluene	50.00	0.00	35.00	70	24- 96
Pentachlorophenol	100.00	0.00	66.00	66	9-103
Pyrene	50.00	0.00	37.00	74	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	100.00	64.00	64	3	42   12- 89
2-Chlorophenol	100.00	66.00	66	1	40   27-123
1,4-Dichlorobenzene	50.00	38.00	77	0	28   36- 97
N-Nitroso-di-n-prop.(1)	50.00	44.00	88	1	38   41-116
1,2,4-Trichlorobenzene	50.00	43.00	85	11	28   39- 98
4-Chloro-3-methylphenol	100.00	74.00	74	5	42   23- 97
Acenaphthene	50.00	35.00	69	2	31   46-118
4-Nitrophenol	100.00	68.00	68	11	50   10- 80
2,4-Dinitrotoluene	50.00	37.00	74	5	38   24- 96
Pentachlorophenol	100.00	64.00	64	3	50   9-103
Pyrene	50.00	36.00	72	2	31   26-127

(1) N-Nitroso-di-n-propylamine

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of qc limits

RPD: 0 out of 11 outside limits

Spike Recovery: 0 out of 22 outside limits

COMMENTS: SW-846 EPA METHOD ~~8270~~ 625







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September 17, 1992

ENSR Consulting  
and Engineering

12201 Merit Drive, Suite 900  
2 Forest Plaza  
Dallas, Texas 75251  
(214) 960-6855  
(214) 960-7140 (FAX)

Mr. Roger C. Anderson  
Environmental Engineer  
State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RE: HOMCO International, Inc. - Site No. 135  
Hobbs, New Mexico  
Groundwater Monitoring Assessment

Dear Mr. Anderson:

ENSR is pleased to submit a summary of all groundwater analytical results from the past three sampling events conducted at the referenced site. The groundwater sampling was based on requirements and recommendations approved by your agency.

### Results

July 18, 1991 - All four wells, a duplicate sample of well OW-1, the on-site water supply well, an equipment blank and a trip blank were tested for the following parameters using listed methods:

- EPA 600/4-88/039:524 - Volatile Organics
- EPA 600/4-88/039:525 - Semivolatile Organics
- EPA 600/4-79/020:418.1 - Total Petroleum Hydrocarbons

During this sampling event all analytes were below detection limit except for some semivolatile organics detected in well OW-1, the duplicate sample for OW-1 and well OW-3. The results are presented in Table 1. Mostly compounds that are above detection limits are presented. Associated method detection limits, currently published final maximum contaminant levels (MCLs) and associated New Mexico - Water Quality Control Commission (NM-WQCC) standards are also presented. The WQCC standards are for groundwater which has an existing concentration of 10,000 mg/l or less TDS. The MCLs were taken from an April 1992 EPA document entitled "Drinking Water Regulations and Health Advisories". The New Mexico water quality standards are taken from the November 25, 1988 version of the Water Quality Control Commission regulations.

January 23, 1992 - All four wells, a duplicate of well OW-1, an equipment blank and a trip blank were sampled and analyzed for EPA 8020 - Benzene, Toluene, Ethylbenzene

September 17, 1992  
Mr. Roger C. Anderson  
Page 2

and Xylenes (BTEX). Also well OW-1 was sampled and analyzed for EPA 600/4-88/039:525 - Semivolatile Organics and Method 625/8270 - Acid/Base-Neutral Extractable Organics. All analytes measured using EPA 625/8270 method were below their associated method detection limit. Some of the semivolatile analytes using method 525 were detected in OW-1. BTEX compounds were detected in both OW-3 and the equipment blank (EB). The results that were above detection limits are presented in Table 2.

August 4, 1992 - Well OW-1 was sampled and analyzed for EPA 600/4-88/039:525 and Method 625/8270. All analytes measured using Method 525 were below their associated method detection limit. The results above detection limit using Method 625/8270 are presented in Table 3. Also included is Figure 1, a potentiometric surface map based on the water level measurements, which indicates the groundwater flow direction to the southeast. BTEX was not sampled for during this event because it was not required per NMOCDC recommendations. Before conducting this sampling event, Bill Olson, of your staff was contacted to confirm the requirements for this sampling event. BTEX was scheduled to be analyzed for once per year in all wells, while the semivolatiles were to be taken twice per year from Well OW-1.

The analytical results were compared to both their associated maximum contaminant level (MCL) and to the NM - WQCC standards. In two cases the MCL was either equaled or exceeded. These occurred during the January 23, 1992 sampling event. In well OW-1 the MCL of 0.2 ppb was exceeded for heptachlor epoxide because the result was 3.9 ppb. In well OW-3 the MCL was equaled for benzene with a result of 5 ppb. The WQCC standard for benzo(a)pyrene is 0.7 ppb. This level was exceeded in well OW-1 during the July 18, 1991 sampling. The result was 0.86 ppb.

The results of the August 1992 sampling revealed that there were no semivolatile constituents which had been found previously during the other sampling events. The presence of benzene appears to be isolated since it was detected in well OW-3 only once in two sampling events. The result is equal to the published Maximum Contaminant Level (MCL) of 5 ppb. It should be noted that this well is located near the southern facility property line and is the most upgradient well. Detection of benzo(a)pyrene in July 1991 and heptachlor epoxide in January 1992 above available published limits also appear to be isolated incidents.

September 17, 1992  
Mr. Roger C. Anderson  
Page 3

## Recommendations

In each of the three sampling events there were no compounds detected in either well OW-2 or OW-4 above their method detection limit. ENSR would recommend, based on the results, that these two wells not be required to be sampled in January 1993. Groundwater elevation measurements would still be taken for these two wells, though.

Based on the information gathered there does not appear to be a trend in the analytical results other than some volatile and semivolatile compounds are occasionally detected in wells OW-1 and OW-3. The most recent sampling which only included well OW-1 occurred in August. Two semivolatiles were detected which do not have an associated MCL. These constituents were both phthalates which are commonly found in plastics and waxes. Although the source of these constituents is not known, it is likely that they are a lab or field contaminant. ENSR would recommend that wells OW-1 and OW-3, a trip blank and an equipment blank all be analyzed for the following during a January 1993 sampling event, per NMOCD requirements:

- EPA Method 625/8270 - Acid/Base Neutral Extractable Organics
- EPA Method 8020 - Benzene, Toluene, Ethylbenzene and Xylenes (BTEX)

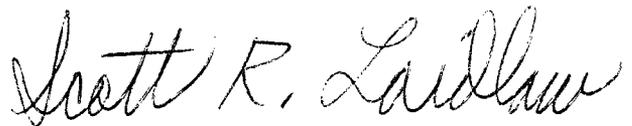
The method detection limits are higher for these methods than in the 500 series methods (524 - Volatile Organics and 525 - Semivolatile Organics in Drinking Water). ENSR believes that the tests results will be adequate for determining whether the contaminant levels exceed regulatory limits so as to be a threat to human health and the environment.

If you agree with these recommendations, please respond to either Caroline Abbott Ziegler in Dallas at (214) 960-6855 or Jim Baker at (713) 520-9900. Please call with any questions. We look forward to your approval.

Sincerely,



Caroline Abbott Ziegler  
HOMCO Site Manager



Scott R. Laidlaw  
HOMCO Project Manager

CAZ/SRL/smb

TABLE 1  
 HOMCO INTERNATIONAL, INC.  
 GROUNDWATER RESULTS - JULY 18, 1991  
 HOBBS, NEW MEXICO - SITE NO. 135

SAMPLE ID	OW-1		OW-1D		OW-3		MCL (PPB)	NM WQCC (PPB)
	RESULT (PPB)	MDL (PPB)	RESULT (PPB)	MDL (PPB)	RESULT (PPB)	MDL (PPB)		
ANALYTICAL PARAMETER								
SEMIVOLATILE ORGANICS **								
2,2',4,4',5,6'-HEXACHLOROBIPHENYL	0.4	0.1	BDL	0.1	BDL	0.1	NA	NA
BENZO(A)PYRENE	0.86	0.04	BDL	0.04	BDL	0.04	*	0.7
BENZO(G,H,I)PERYLENE	1.2	0.1	BDL	0.1	BDL	0.1	NA	NA
DIBENZ(A,H)ANTHRACENE	1.6	0.1	BDL	0.1	BDL	0.1	*	NA
DI(2-ETHYLHEXYL)ADIPATE	33.4	0.6	2.5	0.6	BDL	0.6	*	NA
ENDRIN	BDL	0.5	BDL	0.5	1.7	0.5	*	NA
GAMMA-CHLORDANE	0.4	0.1	BDL	0.1	BDL	0.1	NA	NA
HEPTACHLOR	0.17	0.04	BDL	0.04	BDL	0.04	0.4	NA
IDENO(1,2,3,C,D)PYRENE	1	0.1	BDL	0.1	BDL	0.1	*	NA
METHOXCHLOR	2	0.04	BDL	0.04	BDL	0.04	40	NA
PYRENE	0.76	0.02	BDL	0.02	BDL	0.02	NA	NA

BDL - BELOW DETECTION LIMIT

NA - NO MAXIMUM CONTAMINANT LEVEL (MCL) OR NEW MEXICO WATER QUALITY CONTROL COMMISSION (NM-WQCC) STANDARD

\* - FINAL MCL IS NOT ESTABLISHED

\*\* - USING EPA METHOD 525 (SEMIVOLATILE EXTRACTABLE ORGANICS)

NOTE: THIS TABLE REPRESENTS MOSTLY THE COMPOUNDS THAT WERE ABOVE DETECTION LIMITS.

TABLE 2  
 HOMCO INTERNATIONAL, INC.  
 GROUNDWATER RESULTS - JANUARY 23, 1992  
 HOBBS, NEW MEXICO - SITE NO. 135

SAMPLE ID	OW-1		OW-3		EQUIPMENT BLANK		MCL (PPB)	NM WQCC (PPB)
	RESULT (PPB)	MDL (PPB)	RESULT (PPB)	MDL (PPB)	RESULT (PPB)	MDL (PPB)		
SEMIVOLATILE ORGANICS **								
BUTYLBENZYLPHTHALATE	3.6	0.3	NS	NS	NS	NS	*	NA
DIETHYLPHTHALATE	2.4	0.8	NS	NS	NS	NS	NA	NA
DIMETHYLPHTHALATE	0.06	0.04	NS	NS	NS	NS	NA	NA
DI(2-ETHYLHEXYL)ADIPATE	2.2	0.6	NS	NS	NS	NS	*	NA
DI(2-ETHYLHEXYL)PHTHALATE	21.2	0.6	NS	NS	NS	NS	*	NA
DI-N-BUTYLPHTHALATE	1.2	0.3	NS	NS	NS	NS	NA	NA
HEPTACHLOR EPOXIDE	3.9	0.2	NS	NS	NS	NS	0.2	NA
IDENO(1,2,3,C,D)PYRENE	0.1	0.1	NS	NS	NS	NS	*	NA
LINDANE	0.1	0.1	NS	NS	NS	NS	0.2	NA
BTEX***								
BENZENE	BDL	1	5	1	BDL	1	5	10
TOLUENE	BDL	1	BDL	1	1.8	1	1,000	750
XYLENE	BDL	1	2	1	2	1	10,000	620

BDL - BELOW DETECTION LEVEL

NS - NOT SAMPLED

NA - NO MAXIMUM CONTAMINANT LEVEL (MCL) OR NEW MEXICO WATER QUALITY CONTROL COMMISSION (NM-WQCC) STANDARD

\* - FINAL MCL IS NOT ESTABLISHED

\*\* - USING EPA METHOD 525 (SEMIVOLATILE EXTRACTABLE ORGANICS)

\*\*\* - USING EPA METHOD 8020 (BTEX ANALYSIS)

NOTE: THIS TABLE REPRESENTS MOSTLY THE COMPOUNDS THAT WERE ABOVE DETECTION LIMITS.

**TABLE 3**  
**HOMCO INTERNATIONAL, INC.**  
**GROUNDWATER RESULTS - AUGUST 4, 1992**  
**HOBBS, NEW MEXICO - SITE NO. 135**

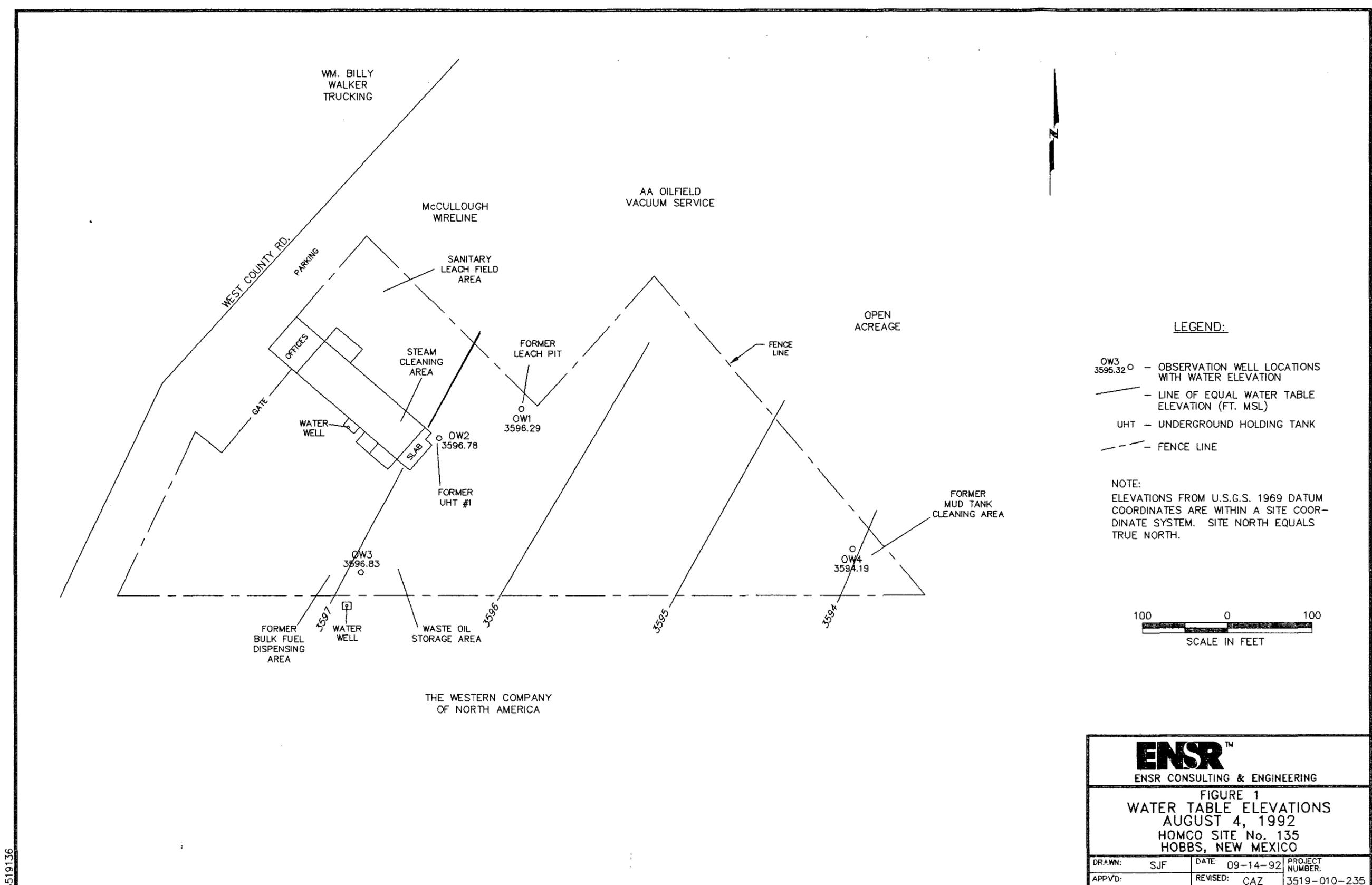
SAMPLE ID	OW-1		MCL (PPB)
	RESULT (PPB)	MDL (PPB)	
ANALYTICAL PARAMETER			
SEMIVOLATILE ORGANICS*			
BIS(2-ETHYLHEXYL)PHTHALATE	12.8	2.5	NA
DI-N-BUTYLPHTHALATE	3.7	2.5	NA

BDL - BELOW DETECTION LIMIT

NA - NO MAXIMUM CONTAMINANT LEVEL (MCL)

\* - USING EPA METHOD 625/8270 (ACID/BASE-NEUTRAL EXTRACTABLE ORGANICS)

NOTE: THIS TABLE REPRESENTS MOSTLY THE COMPOUNDS THAT WERE ABOVE DETECTION LIMITS.



3519136

<b>ENSR</b> <sup>TM</sup>		
ENSR CONSULTING & ENGINEERING		
<b>FIGURE 1</b> <b>WATER TABLE ELEVATIONS</b> <b>AUGUST 4, 1992</b> <b>HOMCO SITE No. 135</b> <b>HOBBS, NEW MEXICO</b>		
DRAWN: SJF	DATE: 09-14-92	PROJECT NUMBER:
APPVD:	REVISED: CAZ	3519-010-235



OIL CONSERVATION DIVISION  
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March 30, 1992

**ENSR Consulting  
and Engineering**

12201 Merit Drive, Suite 900  
2 Forest Plaza  
Dallas, Texas 75251  
(214) 960-6855  
(214) 960-7140 (FAX)

Mr. Roger C. Anderson  
Environmental Engineer  
State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504

RE: HOMCO International, Inc. - Site No. 135  
Hobbs, New Mexico  
Semi-Annual Groundwater Monitoring

Dear Mr. Anderson:

The recommendations of an ENSR report submitted to NM-OCD on October 4, 1991 which was titled "Phase IV Soils and Groundwater Investigation, HOMCO Site 135, Hobbs, New Mexico"; were as follows:

- Sample well OW-1 in January and July 1992. Analyze samples for semi-volatile organic compounds using EPA Method 600/4-88/039525.
- Measure water levels from OW-1, OW-2, OW-3, and OW-4 in January and June 1992.
- After second round of sampling and analyses, submit a letter report to OCD with recommendations for further action.

The NM-OCD responded on November 20, 1991 with the following additional requirements:

- On a yearly basis, groundwater from all the monitor wells will be sampled and analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) using EPA Method 602.
- HOMCO will submit the results of these samplings to OCD within 60 days of the sampling events.

ENSR is pleased to submit the analytical results from the groundwater sampling event conducted on January 23, 1992 at the referenced HOMCO facility in Hobbs, New Mexico. The recommendations and requirements noted above were followed during the January groundwater sampling.

March 30, 1992  
Mr. Roger C. Anderson  
Page 2

## Results

The analytical results indicate the presence of nine semi-volatile compounds in OW-1. These compounds are present at very low levels, above detection limits but below any state or federal action levels. Two out of the nine compounds were also present in the October 1991 results. These results confirm the presence of semi-volatiles at very low levels. Five of the nine parameters are phthalates, commonly used as plasticizers. These could have been introduced from the disposable PVC bailers which were used for sample collection. This may indicate that other sources for detection of these compounds have been introduced.

The analytical results indicate the presence of benzene and xylene in OW-3. The results again are very low. These constituents were also present in the previous sample results in October, 1991. Benzene and toluene were detected at low levels in the equipment blank. This indicates that contamination may have occurred in the field or in the laboratory.

The analytical summary is presented in Table 1. It includes the BTEX results, as well as groundwater elevations for all four wells and the semi-volatile results for OW-1. The complete data package is presented in Attachment A.

## Recommendations

The analytical results for the semi-volatiles are very low and are near or below any EPA action levels. The BETX results are below the New Mexico Water Quality Control Commission groundwater quality standards.

Semi-annual groundwater sampling events will continue and a stainless steel bailer will be used to collect future samples. The stainless bailer will be used in order to avoid introduction of plasticizer contaminants (phthalates) during future sampling events. An assessment will be made after the July sampling to determine if a trend in groundwater quality degradation is occurring or that there were minor interferences caused from field or laboratory contamination.

If you agree with these recommendations, please send a letter to me indicating your approval. If you have any questions, please call Caroline Abbott at (214) 960-6855 or Jim Baker at (713) 520-9900.

ENSR

March 30, 1992  
Mr. Roger C. Anderson  
Page 3

Thank you for your attention to this matter.

Sincerely,



Caroline Abbott  
HOMCO Site Manager



Scott Laidlaw  
HOMCO Project Manager

March 30, 1992  
 Mr. Roger C. Anderson  
 Page 4

**Table 1**  
**Groundwater Analytical Summary**  
**HOMCO**  
**Hobbs, New Mexico**  
**January 1992**

Analysis	OW-1	OW-2	OW-3	OW-4
Benzene	ND	ND	5.0	ND
Toluene	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND
Xylene	ND	ND	2.0	ND
Butylbenzylphthalate	3.6			
Di-n-butylphthalate	1.2			
Diethylphthalate	2.4			
Di(2-ethylhexyl)phthalate	21.2			
Di(2-ethylhexyl)adipate	2.2			
Dimethylphthalate	0.006			
Heptachlor epoxide	3.9			
Indeno(1,2,3,c,d) pyrene	0.1			
Lindane	0.1			
Groundwater Elevation Above Mean Sea Level	3595.44	3595.95	3595.71	3593.35

OW-1 was the only sample analyzed for semi-volatiles.  
 ND - Result was below the method detection limit.  
 All results are presented in ug/l (part per billion).



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DALLAS

HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-1

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-2

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	98.0 %

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Chief Executive Officer



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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-2

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : OW-4  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992  
ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 µg/L	< 1.0 µg/L
Toluene	1.0 µg/L	< 1.0 µg/L
Ethyl benzene	1.0 µg/L	< 1.0 µg/L
Xylenes	1.0 µg/L	< 1.0 µg/L

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 µg/L	100 %

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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-3

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-3

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	5.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	2.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	101 %

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HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-4

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-1A

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

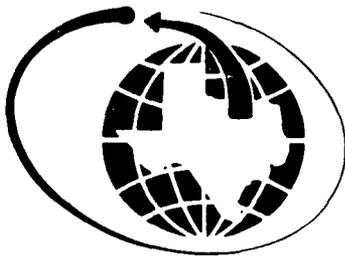
ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	102 %

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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-5

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-1B

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	101 %

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REPORT NUMBER : D92-697-6

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : OW-1  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992  
ANALYSIS METHOD : EPA 525

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthylene	0.1 µg/L	< 0.1 µg/L
Aldrin	0.1 µg/L	< 0.1 µg/L
Anthracene	0.04 µg/L	< 0.04 µg/L
Atrazine	0.1 µg/L	< 0.1 µg/L
Benzo(a)anthracene	0.04 µg/L	< 0.04 µg/L
Benzo(b)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(K)fluoranthene	0.2 µg/L	< 0.2 µg/L
Benzo(a)pyrene	0.04 µg/L	< 0.04 µg/L
Benzo(g,h,i)perylene	0.1 µg/L	< 0.1 µg/L
Butylbenzylphthalate	0.3 µg/L	3.6 µg/L
Alpha-chlordane	0.2 µg/L	< 0.2 µg/L
Gamma-chlordane	0.1 µg/L	< 0.1 µg/L
Trans nonachlor	0.3 µg/L	< 0.3 µg/L
2-Chlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Chrysene	0.04 µg/L	< 0.04 µg/L
Dibenz(a,h)anthracene	0.1 µg/L	< 0.1 µg/L
Di-n-butylphthalate	0.3 µg/L	1.2 µg/L
2,3-dichlorobiphenyl	0.1 µg/L	< 0.1 µg/L
Diethylphthalate	0.8 µg/L	2.4 µg/L



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REPORT NUMBER : D92-697-6  
ANALYSIS METHOD : EPA 525

PAGE 2

SEMIVOLATILE EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Di(2-ethylhexyl)phthalate	0.6 ug/L	21.2 ug/L
Di(2-ethylhexyl)adipate	0.6 ug/L	2.2 ug/L
Dimethylphthalate	0.04 ug/L	0.06 ug/L
Endrin	0.5 ug/L	< 0.5 ug/L
Fluorene	0.2 ug/L	< 0.2 ug/L
Heptachlor	0.04 ug/L	< 0.04 ug/L
Heptachlor epoxide	0.2 ug/L	3.9 ug/L
2,2',3,3',4,4',6-hepta-chlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Hexachlorobenzene	0.1 ug/L	< 0.1 ug/L
2,2',4,4',5,6'-hexachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Hexachlorocyclopentadiene	0.06 ug/L	< 0.06 ug/L
Indeno(1,2,3,c,d)pyrene	0.1 ug/L	0.1 ug/L
Lindane	0.1 ug/L	0.1 ug/L
Methoxychlor	0.04 ug/L	< 0.04 ug/L
2,2',3,3',4,5',6,6'-octachlorobiphenyl	0.2 ug/L	< 0.2 ug/L
2,2',3',4,6-pentachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Pentachlorophenol	0.3 ug/L	< 0.3 ug/L
Phenanthrene	0.01 ug/L	< 0.01 ug/L
Pyrene	0.02 ug/L	< 0.02 ug/L
Simazine	0.2 ug/L	< 0.2 ug/L
2,2',4,4'-tetrachlorobiphenyl	0.1 ug/L	< 0.1 ug/L
Toxaphene	5.0 ug/L	< 5.0 ug/L
2,4,5-trichlorobiphenyl	0.06 ug/L	< 0.06 ug/L
Alachlor	0.16 ug/L	< 0.16 ug/L



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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-6

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-1

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

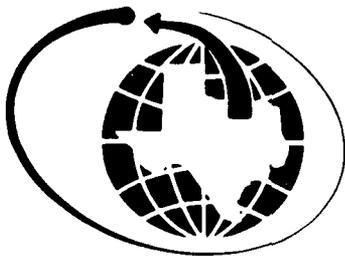
ANALYSIS METHOD : EPA 625

ACID EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
4-Chloro-3-methylphenol	3.8 µg/L	< 3.8 µg/L
2-Chlorophenol	4.1 µg/L	< 4.1 µg/L
2,4-Dichlorophenol	3.4 µg/L	< 3.4 µg/L
2,4-Dimethylphenol	3.4 µg/L	< 3.4 µg/L
4,6-Dinitro-2-methylphenol	30.0 µg/L	< 30.0 µg/L
2,4-Dinitrophenol	52.5 µg/L	< 52.5 µg/L
2-Methylphenol	6.3 µg/L	< 6.3 µg/L
2-Nitrophenol	4.5 µg/L	< 4.5 µg/L
4-Nitrophenol	3.0 µg/L	< 3.0 µg/L
Pentachlorophenol	4.5 µg/L	< 4.5 µg/L
Phenol	1.9 µg/L	< 1.9 µg/L
2,4,6-Trichlorophenol	3.4 µg/L	< 3.4 µg/L

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Phenol-d5 (SS)	100 µg/L	71.7 %
2-Fluorophenol (SS)	100 µg/L	101 %
2,4,6-Tribromophenol (SS)	100 µg/L	82.3 %

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Chief Executive Officer



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DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-6

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering

ADDRESS : 12201 Merit Dr. #900

: Dallas, TX 75251

ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid

ID MARKS : OW-1

PROJECT : 3519-010-235 Homco Intl.

DATE SAMPLED : 23-JAN-1992

ANALYSIS METHOD : EPA 625

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Acenaphthene	2.4 µg/L	< 2.4 µg/L
Acenaphthylene	4.4 µg/L	< 4.4 µg/L
Anthracene	2.4 µg/L	< 2.4 µg/L
Benzidine	55.0 µg/L	< 55.0 µg/L
Benzo(a)anthracene	9.8 µg/L	< 9.8 µg/L
Benzo(b)fluoranthene	6.0 µg/L	< 6.0 µg/L
Benzo(k)fluoranthene	3.1 µg/L	< 3.1 µg/L
Benzo(g,h,i)perylene	5.1 µg/L	< 5.1 µg/L
Benzo(a)pyrene	3.1 µg/L	< 3.1 µg/L
Bis(2-chloroethoxy)methane	6.6 µg/L	< 6.6 µg/L
Bis(2-chloroethyl)ether	7.1 µg/L	< 7.1 µg/L
Bis(2-chloroisopropyl)ether	7.1 µg/L	< 7.1 µg/L
Bis(2-ethylhexyl)phthalate	3.1 µg/L	< 3.1 µg/L
4-Bromophenylphenyl ether	2.4 µg/L	< 2.4 µg/L
Butyl benzyl phthalate	3.1 µg/L	< 3.1 µg/L
2-Chloronaphthalene	2.4 µg/L	< 2.4 µg/L
4-Chlorophenylphenyl ether	5.3 µg/L	< 5.3 µg/L
Chrysene	3.1 µg/L	< 3.1 µg/L
Dibenz(a,h)anthracene	3.1 µg/L	< 3.1 µg/L



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REPORT NUMBER : D92-697-6  
ANALYSIS METHOD : EPA 625

PAGE 2

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
2,3,7,8-Tetrachlorodibenzodioxin		Negative
Di-n-butylphthalate	3.1 µg/L	< 3.1 µg/L
1,3-Dichlorobenzene	2.4 µg/L	< 2.4 µg/L
1,4-Dichlorobenzene	5.5 µg/L	< 5.5 µg/L
1,2-Dichlorobenzene	2.4 µg/L	< 2.4 µg/L
3,3'-Dichlorobenzidine	20.6 µg/L	< 20.6 µg/L
Diethylphthalate	2.4 µg/L	< 2.4 µg/L
Dimethylphthalate	2.0 µg/L	< 2.0 µg/L
2,4-Dinitrotoluene	7.1 µg/L	< 7.1 µg/L
2,6-Dinitrotoluene	2.4 µg/L	< 2.4 µg/L
Di-n-octylphthalate	3.1 µg/L	< 3.1 µg/L
Fluoranthene	2.8 µg/L	< 2.8 µg/L
Fluorene	2.4 µg/L	< 2.4 µg/L
Hexachlorobenzene	2.4 µg/L	< 2.4 µg/L
Hexachlorobutadiene	1.1 µg/L	< 1.1 µg/L
Hexachlorocyclopentadiene	6.3 µg/L	< 6.3 µg/L
Hexachloroethane	2.0 µg/L	< 2.0 µg/L
Indeno(1,2,3-cd)pyrene	4.6 µg/L	< 4.6 µg/L
Isophorone	2.8 µg/L	< 2.8 µg/L
Naphthalene	2.0 µg/L	< 2.0 µg/L
Nitrobenzene	2.4 µg/L	< 2.4 µg/L
N-Nitrosodimethylamine	6.3 µg/L	< 6.3 µg/L
N-Nitrosodiphenylamine	6.3 µg/L	< 6.3 µg/L
N-Nitrosodipropylamine	6.3 µg/L	< 6.3 µg/L
Phenanthrene	6.8 µg/L	< 6.8 µg/L
Pyrene	2.4 µg/L	< 2.4 µg/L



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REPORT NUMBER : D92-697-6  
ANALYSIS METHOD : EPA 625

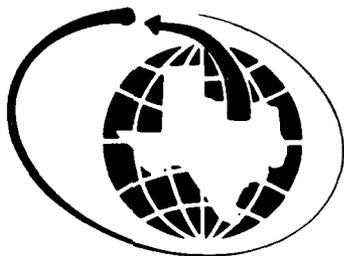
PAGE 3

BASE-NEUTRAL EXTRACTABLE ORGANICS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
1,2,4-Trichlorobenzene	2.4 $\mu\text{g/L}$	< 2.4 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Nitrobenzene-d5( SS )	50.0 $\mu\text{g/L}$	89.6 %
2-Fluorobiphenyl( SS )	50.0 $\mu\text{g/L}$	88.3 %
Terphenyl-d14 (SS)	50.0 $\mu\text{g/L}$	74.6 %

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Chief Executive Officer



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DALLAS

HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-6

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : OW-1  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992

TENTATIVELY IDENTIFIED COMPOUNDS			
COMPOUND	RETENTION TIME	FRACTION	RESULT
No compounds detected		ABN	13 $\mu\text{g/L}$

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HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-7

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : TB  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992  
ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	99.0 %

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Chief Executive Officer



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HOUSTON

DATE RECEIVED : 24-JAN-1992

REPORT NUMBER : D92-697-8

REPORT DATE : 13-FEB-1992

SAMPLE SUBMITTED BY : ENSR Consulting And Engineering  
ADDRESS : 12201 Merit Dr. #900  
: Dallas, TX 75251  
ATTENTION : Ms. Caroline Abbott

SAMPLE MATRIX : Liquid  
ID MARKS : EB  
PROJECT : 3519-010-235 Homco Intl.  
DATE SAMPLED : 23-JAN-1992  
ANALYSIS METHOD : EPA 8020

BTEX ANALYSIS		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Toluene	1.0 $\mu\text{g/L}$	1.8 $\mu\text{g/L}$
Ethyl benzene	1.0 $\mu\text{g/L}$	< 1.0 $\mu\text{g/L}$
Xylenes	1.0 $\mu\text{g/L}$	2.0 $\mu\text{g/L}$

QUALITY CONTROL DATA		
SURROGATE COMPOUND	SPIKE LEVEL	SPIKE RECOVERED
Bromofluorobenzene(SS)	50.0 $\mu\text{g/L}$	97.0 %

NDRC Laboratories, Inc.

*David R. Godwin* ✓ 2  
David R. Godwin, Ph.D.  
Chief Executive Officer



# NDRC LABORATORIES, INC.

A member of Inchcape Environmental

1089 East Collins Blvd., Richardson, Texas 75081 • (214) 238-5591 • FAX (214) 238-5592

BEAUMONT

DALLAS

HOUSTON

DATE RECEIVED: 24-JAN-1992

REPORT NUMBER: D92-697

REPORT DATE: 13-FEB-1992

SUBMITTED BY: ENSR Consulting And Engineering

## LABORATORY ANALYSIS QUALITY CONTROL REPORT

ANALYSIS: Benzene  
Technician: FJP  
Extraction Date: 1/24/92  
Date Analyzed: 1/24/92  
QC Date: 1/24/92  
QC Sample Number: D92-582-1

Analysis Method: EPA 8020  
Extraction Method: EPA 5030  
MS/MSD RPD: 25 %  
Average Spike Recovery: 102 %  
Duplicate RPD: ----  
Method Blank: <1.0 µg/L  
Blank Spike Recovery: 102 %

ANALYSIS: Ethyl Benzene  
Technician: FJP  
Extraction Date: 1/24/92  
Date Analyzed: 1/24/92  
QC Date: 1/24/92  
QC Sample Number: D92-582-1

Analysis Method: EPA 8020  
Extraction Method: EPA 5030  
MS/MSD RPD: 24 %  
Average Spike Recovery: 97.3 %  
Duplicate RPD: ----  
Method Blank: <1.0 µg/L  
Blank Spike Recovery: 86.6 %

**HOMCO International, Inc.**

Bellaire, Texas



Discharge Plan for  
HOMCO Facility No. 135  
Hobbs, New Mexico

Submitted to:

New Mexico Oil Conservation  
Division

**ENSR Consulting and Engineering**

**June 1991**

**Document Number 3519-006**

I. **Type of Operation**

HOMCO International, Inc. is an oilfield rental tool company which provides on and off-site support services to the oil and natural gas industry. On-site services include the maintenance and storage of a variety of rental equipment, including fishing and cutting tools. HOMCO's inventory of rental tools includes, but is not limited to: blowout preventers, drill pipe, drill collars, washover pipe, kelleys, slips, elevators, jars, pumping units, accumulator tanks, and reverse units.

On-site high pressure steam cleaning, minor servicing and repairs, paint removing, and painting activities are performed on the tools after each rental usage. On-site inspection and coating services are performed on drill pipe, drill collars, casing, tubing, and other drilling equipment.

II. **Name of Operator or Legally Responsible Party and Local Representative**

- Facility Owner: HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252  
(713) 663-6444  
  
Robert J. Medler  
Director, Environmental and Safety: Corporate
  
- Facility Manager: Conrad Lee
  
- Hobbs Facility Address: HOMCO International, Inc.  
P.O. Box 2250  
Hobbs, New Mexico 88240  
(505) 393-3107
  
- Hobbs Facility Location: 3000 West County Road  
Hobbs, New Mexico 88240  
Lea County

### III. Location of Discharge

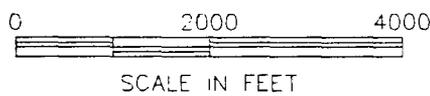
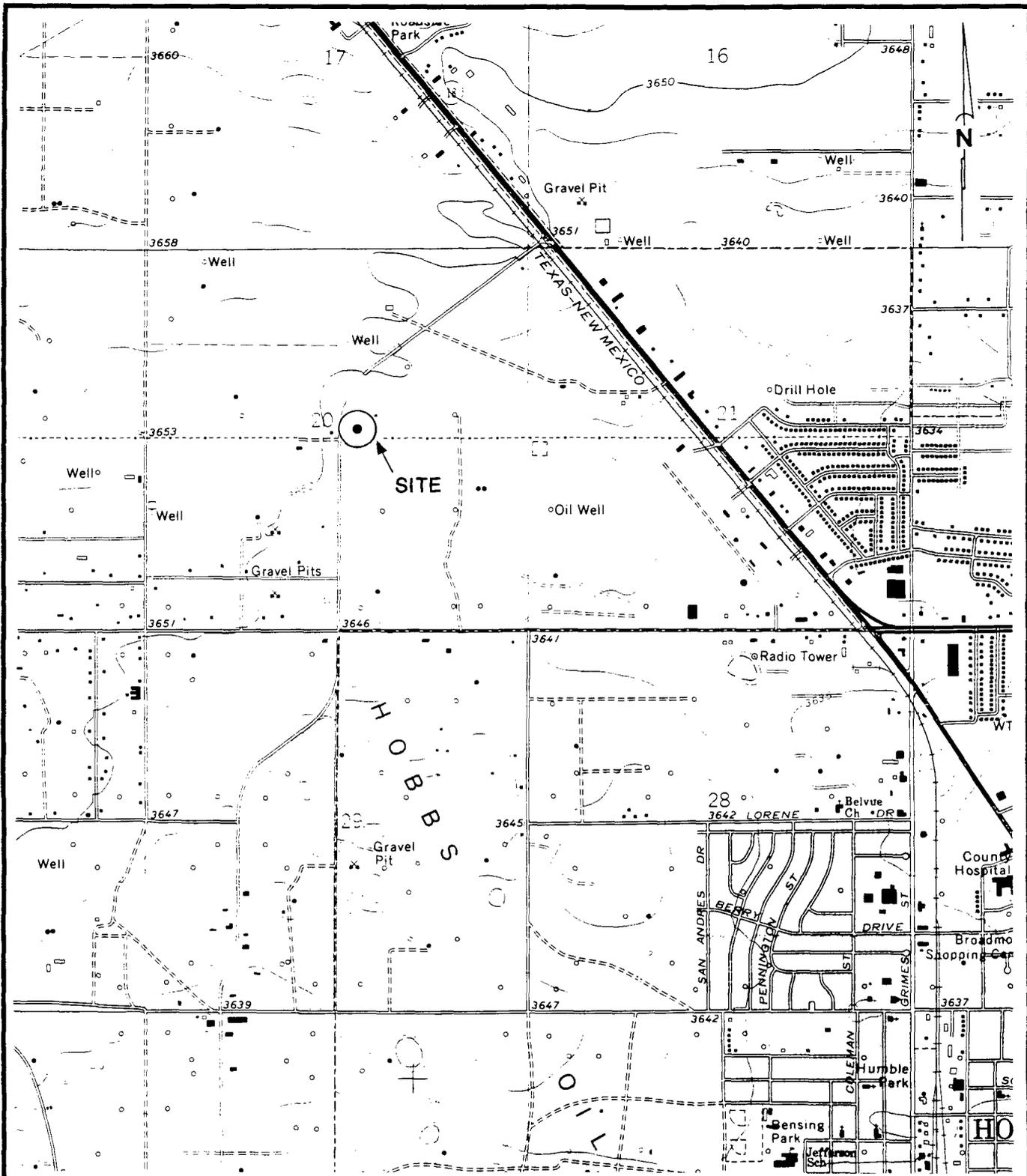
- Legal Description:  
Section 29, Township 18, South Range 38 East, Lee County  
3000 West County Road  
Hobbs, New Mexico

- Topographic Map:

Figure 1 shows the site location as represented on a portion of the United States Geological Survey - Hobbs West, New Mexico Quadrangle.

- Facility Site Plan

The site encompasses approximately 10 acres as shown in Figure 2.



REFERENCE: U.S.G.S. Quadrangle Map for Hobbs West, New Mexico, 1979.

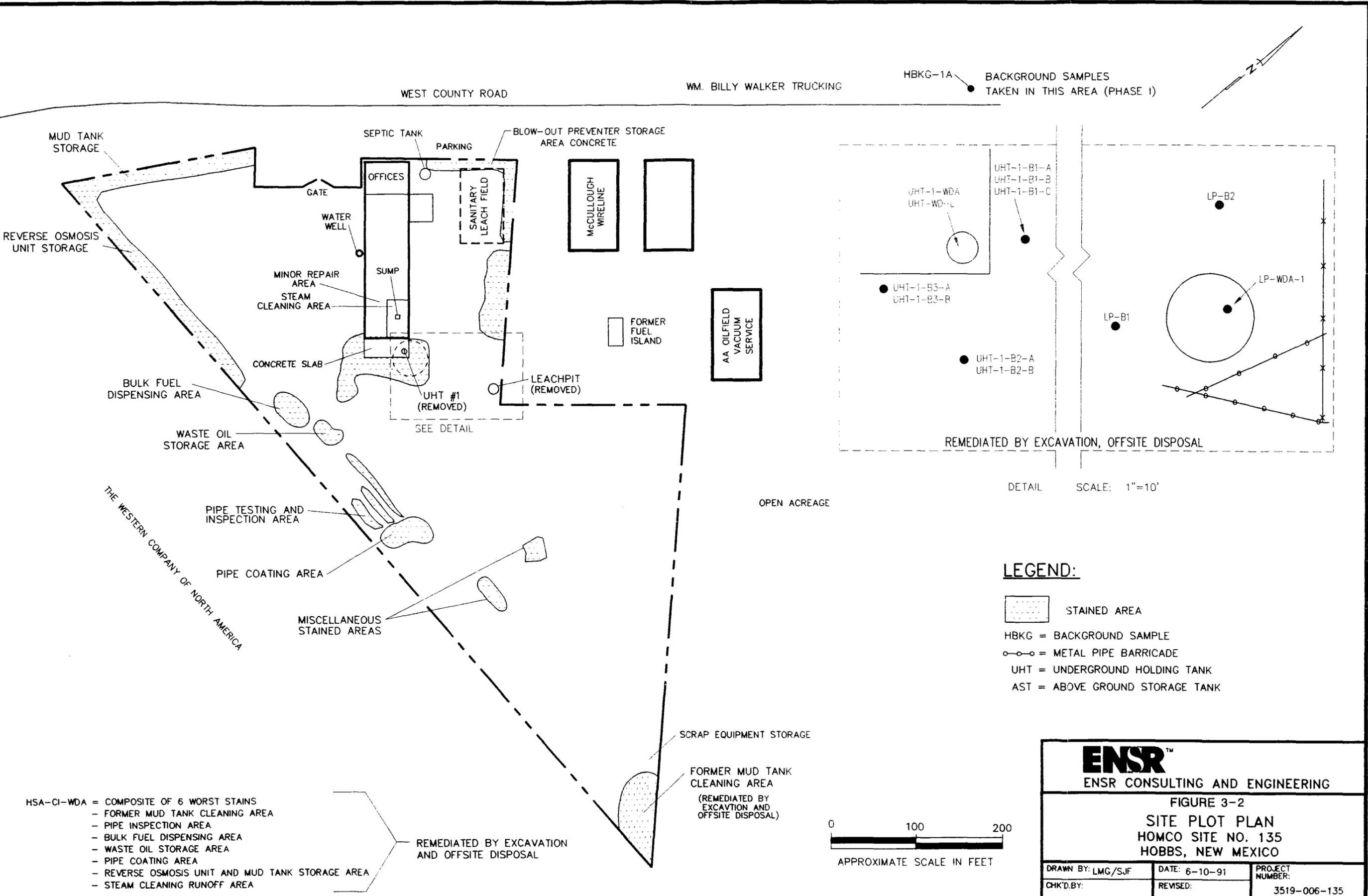
**ENSR**<sup>TM</sup>

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FIGURE 3-1  
SITE LOCATION MAP  
HOMCO SITE No. 135  
HOBBS, NEW MEXICO

DRAWN BY: SJF	DATE: 6-10-91	PROJECT NUMBER:
CHK'D BY:	REVISED:	3519-006-135

TOPO



- HSA-CI-WDA = COMPOSITE OF 6 WORST STAINS
- FORMER MUD TANK CLEANING AREA
  - PIPE INSPECTION AREA
  - BULK FUEL DISPENSING AREA
  - WASTE OIL STORAGE AREA
  - PIPE COATING AREA
  - REVERSE OSMOSIS UNIT AND MUD TANK STORAGE AREA
  - STEAM CLEANING RUNOFF AREA

**LEGEND:**

- STAINED AREA
- HBKG = BACKGROUND SAMPLE
- METAL PIPE BARRICADE
- UHT = UNDERGROUND HOLDING TANK
- AST = ABOVE GROUND STORAGE TANK

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 ENSR CONSULTING AND ENGINEERING

FIGURE 3-2  
 SITE PLOT PLAN  
 HOMCO SITE NO. 135  
 HOBBS, NEW MEXICO

DRAWN BY: LMG/SJF	DATE: 6-10-91	PROJECT NUMBER:
CHK'D BY:	REVISED:	3519-006-135

3519122

IV. **Landowners**

The HOMCO-Hobbs facility landowner of record is:

HOMCO International, Inc.  
P.O. Box 2442  
Houston, TX 77252  
(713) 663-6444

## V. Facility Description

### A. Pre-Phase III Facility/Site Description (see Figure 2 for Site Plan)

1. Buildings/Site Layout: A 120,000-square foot, two-story metal building is situated on site and oriented in a northwest-southeast direction. The building is partitioned into three main sections: administrative offices (20%), storage for small rental tools (40%), and a cleaning and maintenance area (40%). An exterior concrete pad as wide as the building extends 20 feet from the southeastern perimeter of the subject building.

The HOMCO yard is primarily used to store oilfield pipe, blowout preventers (BOPs), and large HOMCO rental units. Oilfield pipe is stored on racks located on the southeasterly half of the subject site. BOPs are stored on a narrow concrete slab adjacent to the northernmost, northeast, and northwest perimeters of the subject site.

Large rental units are stored along the southern and southwestern perimeters of the subject property.

Pipe coating and pipe testing activities are performed approximately 100 to 200 feet southeast of the building.

2. Fencing: An 8-foot chain link fence is present along the perimeter of the subject site.
3. Pits, Berms: A mud tank cleanout (MTC) area existed in the easternmost corner of the subject site. The MTC area is no longer used for cleaning as all mud tanks are cleaned on the actual drilling location. The MTC area has been inactive since approximately 1984. Dimensions were estimated to be approximately 100 feet by 40 feet by 10 feet. Contents of the MTC

area are reported to have been residual tank bottoms in the rental mud tanks returned to the site from off-site oil/gas locations.

4. Aboveground Storage Tanks: One skid-mounted 2,000-gallon steel tank has been used at the subject facility to provide for bulk storage and dispensing of diesel product.
5. Process Wastewater Disposal System Underground Holding Tanks (prior to September 25, 1990): On-site steam cleaning of rental tools, drill pipe, and vehicles generates an oily wastestream that is discharged into a concrete-lined sump in the main building. The sump contents are discharged to a concrete underground holding tank (UHT #1) for solids settling. The remaining oily water effluent is discharged to an underground, cinderblock-lined, cavity drain (or leachpit) with no structural bottom.

The process wastewater disposal system is described in more detail in Section VIII.C.

6. Miscellaneous Discharges: The subject facility stores oilfield equipment at various locations on the subject site. The storage of this equipment results in de minimus oily spills and drips from the hydraulic lines, valves, etc., associated with HOMCO's rental equipment onto surface soils.

B. Post-Phase III Facility/Site Description

See Section IX, Proposed Modifications, for a complete discussion of existing facility/site description -- Post-Phase III - and proposed modifications.

VI. **Materials Stored or Used at Facility**

Table 6-1 lists materials stored or used at the facility; provides information on the general composition of the material, (whether in solid, liquid, or aerosol form), and describes type of container used for storage, estimated volume stored, and location. Material Safety Data Sheets (MSDS) have been provided where requested by the NM-OCD.

**Table 6-1  
Materials Stored or Used at the Facility  
HOMCO International, Inc.  
Hobbs, New Mexico**

Name	General Makeup or Specific Brand Name (if requested)	Solids or Liquids	Type of Container (tank, drums, etc.)	Estimated Volume Stored	Location (yard, shop, drum storage, etc.)
Drilling fluids (includes general makeup and special additives - e.g., oil, chrome, etc.)	N/A	N/A	N/A	N/A	N/A
Brines-(KCl,NaCl, etc.)	N/A	N/A	N/A	N/A	N/A
Acids/Caustics (provide names & MSDS)	Cougar Derusting hot vat compound	Solids *(powder)	Cardboard Drum	50 - 100 lbs per 3 months	Yard - inside of fence
Detergents/ Soaps	N/A	N/A	N/A	N/A	N/A
Solvents & Degreasers, Cougar concentrate (provide names & MSDS)	Safety Kleen 105 parts washing solvent	Liquid	Metal drums with Ringed lids	7 - 35 gallon drums	Yard - south fence near acid area
Paraffin Treatment/Emulsion Breakers (provide names & MSDS)	N/A	N/A	N/A	N/A	N/A
Biocides (provide names & MSDS)	N/A	N/A	N/A	N/A	N/A
Others - (include other liquids & solids, e.g., cement, etc.)	Isocyanate (paint hardener)	Liquid	Pint Cans	≈1 gallon	Water well house - addition to Main Shop Building
Others - (include other liquids & solids, e.g., cement, etc.)	ZEP Dry Moby	Aerosol	Cans	24 - 16 oz.	East side of shop - wooden cabinet
Others - (include other liquids & solids, e.g., cement, etc.)	Marvel mystery oil	Liquid	Cans	2 gallons	Southeast corner of shop - wooden cabinet

TABLE 6-1 (Cont'd)

Materials Stored or Used at the Facility  
 HOMCO International, Inc.  
 Hobbs, New Mexico

Name	General Makeup or Specific Brand Name (if requested)	Solids or Liquids	Type of Container (tank, drums, etc.)	Estimated Volume Stored	Location (yard, shop, drum storage, etc.)
Others - (include other liquids & solids, e.g., cement, etc.)	Paints	Liquid and aerosols	Gallon cans 16 oz. cans	≈60 gallons 24 cans	wellhouse
Others - (include other liquids & solids, e.g., cement, etc.)	Antifreeze	Liquid	Drum	55 gallons	yard inside fence
Others - (include other liquids & solids, e.g., cement, etc.)	Motor oil	Liquid	Bulk Tank AST	250 gallon	southeast corner of yard
Others - (include other liquids & solids, e.g., cement, etc.)	TLC gear oil B5W/140	Liquid	Metal Drum	35 gallon	south end of shop
Others - (include other liquids & solids, e.g., cement, etc.)	WD-40	Pump liquid	Metals Cans	2 1-gallon cans	east side of shop - wooden cabinet
Others - (include other liquids & solids, e.g., cement, etc.)	Starting fluid	Aerosol	Cans	12 - 42 oz cans or 1 case	north central end of shop
Others - (include other liquids & solids, e.g., cement, etc.)	Acetylene (oxygen welding)	Gas	Metal Cylinders	2 - Oxygen 2 - Acetylene 3 - Nitrogen	southwest end of shop chained to wall
Others - (include other liquids & solids, e.g., cement, etc.)	Zn-50 (petroleum grease, zinc & additives)	Solid	plastic buckets	5 gallons	southeast corner of shop
Others - (include other liquids & solids, e.g., cement, etc.)	Hydraulic oil	Liquid	Metal Drums	2 55-gallon	former AST area yard

\*Used in solution with water to remove paint from rental tools.

**VII. Sources and Quantities of Effluent and Waste Solids Generated at the Facility**

Table 7-1 provides types of effluent related to each source and estimates of the quantity of effluent generated. Types and volumes of major additives associated with the effluent are also listed.

TABLE 7-1

Sources and Quantities of Effluent and  
Waste Solids Generated at the Facility  
HOMCO International, Inc.  
Hobbs, New Mexico

Waste Type	General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)	Volume Per Month (bbl or gal)	Major Additives (e.g., degreaser fluids from truck washing, soap in steam cleaners)
Truck Wastes (describe types of original contents trucked (e.g., brine, produced water, drilling fluids, oil wastes, etc.))	N/A	N/A	N/A
Truck, Tank & Drum Washing Steam Cleaning of Parts Equipment, Tanks	Oil, wastewater, oily sludges	Approximately 560 bbls	- Soap in steam cleaner - Degrease fluids from truck washing
Solvent/Degreaser Use	- Small parts cleaning - Residues	2 - 3 55 bbls	Degreaser fluids from tool cleaning
Spent Acids, Caustics, or Completion Fluids (describe)	Paint Removal solution	20 bbls	Caustic powder - degreaser paraffin from field
Waste Slop Oil	N/A	N/A	N/A
Waste Lubrication and Motor Oils, not changed on-site	N/A	N/A	N/A
Oil Filters not changed on-site	Trucks	N/A	N/A
Solids and Sludges from Tanks (describe types of materials - e.g., crude oil tank bottoms, sand, etc.)	N/A Cleaned out on location and not at HOMCO facility	N/A	N/A
Painting Wastes: Xylene (Paint Thinner) xylene were used to clean painting equipment in plastic gallon jug	- Painting Equipment - Cleaning Solution - Paint removal vat solution/sludge	1 - 2 gallons 20 bbls	xylene Caustic soda paints, paraffins

TABLE 7-1 (Cont'd)

Sources and Quantities of Effluent and  
Waste Solids Generated at the Facility  
HOMCO International, Inc.  
Hobbs, New Mexico

Waste Type	General Composition and Source (solvents from small parts cleaning, oil filters from trucks, etc.)	Volume Per Month (bbl or gal)	Major Additives (e.g., degreaser fluids from truck washing, soap in steam cleaners)
Sewage (indicate if other wastes mixed with sewage; if no commingling, domestic sewage under jurisdiction of the NMEID)	Sanitary New Mexico Environmental Improvement Division (NMEID)	N/A	N/A
Other Waste Solids (cement, construction materials, used drums)	<ul style="list-style-type: none"> <li>- Paint Cans</li> <li>- Aerosol cans</li> <li>- hydraulic oil drums</li> </ul>	(30 - 50 gallons) - 1 dumpster per week (24 cans) - air dried and crushed (35 gallons) - recycled	N/A

VIII. **Description of Current Liquid and Solid Waste Collection/Storage/Disposal Procedures**

A. Summary Information

Table 8-1 summarizes information about on-site collection, storage and disposal systems and whether the collection, storage or disposal location are tanks or drums, floor drain or sump, lined or unlined pit, on-site injection well, leachfield or leachpit or off-site disposal.

B. Collection and Storage Systems and Disposal Procedures

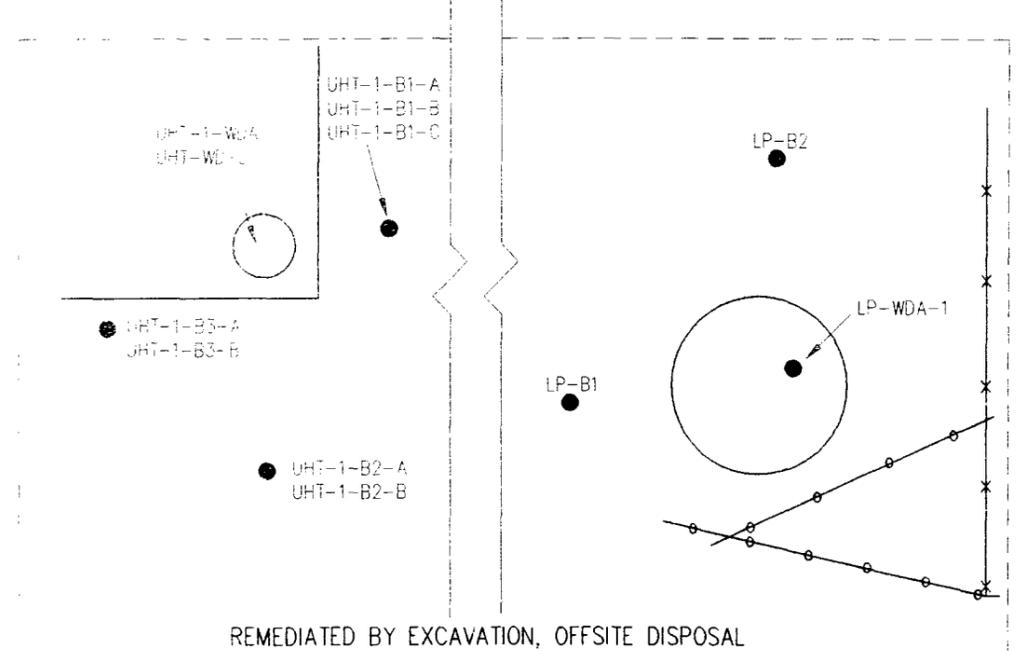
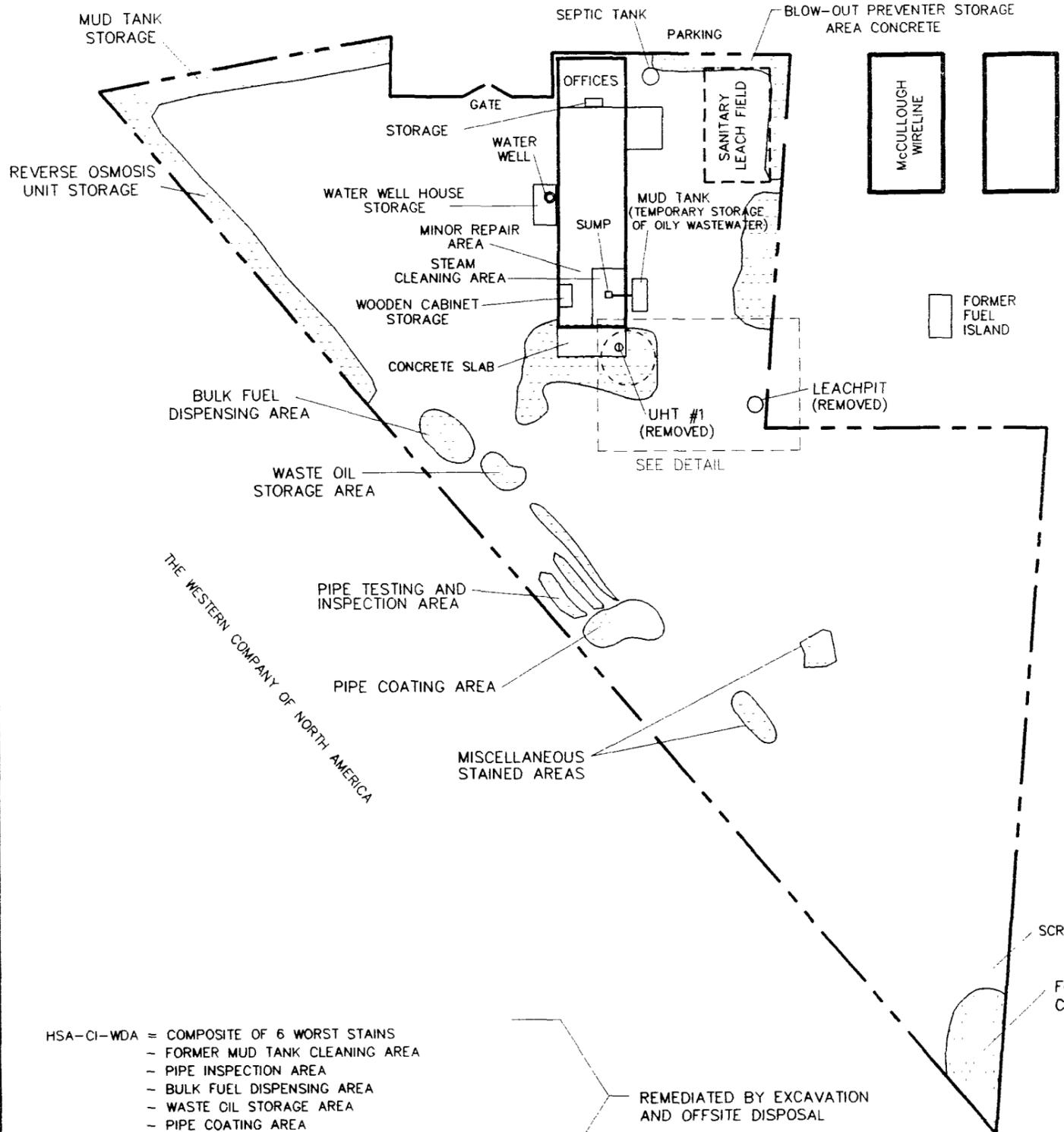
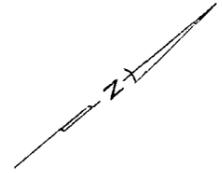
1. Wastewater System: Table 8-2 summarizes information concerning on-site wastewater collection, storage, and disposal systems. Figure 3-1 shows existing on-site wastewater flow schematics.

On-site steam cleaning of rental tools, drill pipe, and vehicles discharges approximately 23-25 bbls (42 gallons/bbl) per day of oily wastewater to a concrete lined 200-gallon below grade sump located inside the main building. Oily wastewater has been temporarily pumped via hosing to an aboveground mud tank since September 25, 1990. The wastes are transferred via vacuum truck to Controlled Recovery, Inc. (CRI) for disposal, per NM-OCD approval dated, December 11, 1990, Reference No. 5. All ENSR/HOMCO and New Mexico-OCD correspondence is referenced in Part XIII. Prior to September 25, 1990, the sump discharged via underground 4" PVC piping to an exterior underground holding tank (UHT#1) which discharged via underground 4" PVC piping to the leachpit discussed in Section C of this Part. Reference document No. 2 presents pre-remediation (Phase III) on-site wastewater collection, storage, and disposal systems. Proposed modifications to the on-site wastewater system were submitted to the NM-OCD and approved on September 1990

WEST COUNTY ROAD

WM. BILLY WALKER TRUCKING

HBKG-1A BACKGROUND SAMPLES TAKEN IN THIS AREA (PHASE I)



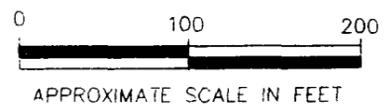
DETAIL SCALE: 1"=10'

**LEGEND:**

- STAINED AREA
- HBKG = BACKGROUND SAMPLE
- METAL PIPE BARRICADE
- UHT = UNDERGROUND HOLDING TANK
- AST = ABOVE GROUND STORAGE TANK

- HSA-CI-WDA = COMPOSITE OF 6 WORST STAINS
- FORMER MUD TANK CLEANING AREA
- PIPE INSPECTION AREA
- BULK FUEL DISPENSING AREA
- WASTE OIL STORAGE AREA
- PIPE COATING AREA
- REVERSE OSMOSIS UNIT AND MUD TANK STORAGE AREA
- STEAM CLEANING RUNOFF AREA

REMEDIED BY EXCAVATION AND OFFSITE DISPOSAL



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FIGURE 8-1  
SITE PLOT PLAN  
HOMCO SITE NO. 135  
HOBBS, NEW MEXICO

DRAWN BY: LMG/SJF	DATE: 6-10-91	PROJECT NUMBER:
CHK'D BY:	REVISED:	3519-006-135

3519123

TABLE 8-1

Summary Description of Existing Liquid and Solids Waste Collection and Disposal  
 HOMCO International, Inc.  
 Hobbs, New Mexico

Waste Type	Tank(T)/ Drum(S)	Floor Drain(F) Sumps(S)	Pits Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field/Pit	Offsite Disposal
1. Truck Wastes (None)	N/A	N/A	N/A	N/A	N/A	N/A
2. Truck, Tank Washing, Drum Washing	N/A	N/A	N/A	N/A	N/A	Off-site Collection/Disposal
	N/A	N/A	N/A	N/A	N/A	N/A
3. Steam Cleaning of Parts, Equipment, Tanks	Mud Tank (Temporary System)	F/S	N/A	N/A	N/A	Controlled Recovery, Inc. (CRI) Halfway, New Mexico
4. Solvent/Safety Klean Degreaser	Drums	N/A	N/A	N/A	N/A	Safety Klean Recycling
5. Spent Acids or Completion Fluids (None)	N/A	N/A	N/A	N/A	N/A	N/A
Cautistics	Tank	N/A	N/A	N/A	N/A	Waste currently not classified as caustic solution is still in use
6. Waste Stop Oil (None)	N/A	N/A	N/A	N/A	N/A	N/A
7. Waste Lubrication and Motor Oils	N/A	N/A	N/A	N/A	N/A	OS Quick Change
	N/A	N/A	N/A	N/A	N/A	OS Quick Change
9. Solids and Sludges from Tanks	N/A	N/A	N/A	N/A	N/A	Solids & Sludges are removed from rental tanks at drilling location prior to returning to facility for refurbishment
	(Caustic Vat)	N/A	N/A	N/A	N/A	NM-ODC Approved Off-site disposal proposed when solution is spent
10. Painting Wastes	Painting Equipment	N/A	N/A	N/A	N/A	Gallon Can-Evaporation
11. Sewage (Sanitary)	N/A	N/A	N/A	N/A	N/A	N/A

TABLE 8-1 (Cont'd)

Summary Description of Existing Liquid and Solids Waste Collection and Disposal  
 HOMCO International, Inc.  
 Hobbs, New Mexico

Waste Type	Tank(T)/ Drum(S)	Floor Drain(F) Sumps(S)	Pits Lined(L) or Unlined(U)	Onsite Injection Well	Leach Field/Pit	Offsite Disposal
12. Other Waste Liquids	N/A	N/A	N/A	N/A	N/A	N/A
13. Other Waste Solids						
Construction Material	N/A	N/A	N/A	N/A	N/A	Waste Control of New Mexico
Municipal Solid Waste	Dumpster	N/A	N/A	N/A	N/A	Waste Control of New Mexico
Used Pipe Dope Containers	Dumpster	N/A	N/A	N/A	N/A	Waste Control of New Mexico
Used Xylene Containers	N/A	N/A	N/A	N/A	N/A	Evaporation - Reuse of Cans
Used Aerosol Cans	N/A	N/A	N/A	N/A	N/A	Waste Control of New Mexico
Scrap Metal	N/A	N/A	N/A	N/A	N/A	Hobbs Iron & Metal (recycling)
Paint Booth Paint Filters	N/A	N/A	N/A	N/A	N/A	Waste Control of New Mexico

TABLE 8-2

Description of Current Liquid and Solid Waste  
Collection Storage Disposal Procedures  
HOMCO International, Inc.  
Hobbs, New Mexico

Waste Type	Potential Surface/Subsurface Contaminants in Wastestream		Collection/Storage Mechanisms						
			Sumps		Tanks/Vats Pressurized (P) NonPressurized (NP) Aboveground (AG) Belowground (BG)	Pipes/Pipelines Pressurized (P) NonPressurized (NP) Aboveground (AG) Belowground (BG)	Drums	Cover	
			Size	Composition					
1. Truck Wastes	None	None	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. Truck, Tank and Drum Washing	Oils	Oils	200 gallon	Concrete	AG (Mud Tank Temporary System)	Pressurized via Pump/hose hookup to Mud Tank	N/A	N/A	Plastic
3. Steam cleaning of parts, equipment, tanks	Oils	Oils	200 gallon	Concrete	AG (Mud Tank Temporary System)	Pressurized via pump/hose hookup to Mud Tank	N/A	N/A	Plastic
4. Solvent Degreaser	None (Safety-Kleen Trays used to catch de minimis spills & drips)	None (Safety-Kleen Trays used to catch de minimis spills & drips)	N/A	N/A	N/A	N/A	N/A	55-gallon	ringed lid
5. Spent Acids/Caustics Completion Fluids	Caustic Soda	Caustic Soda	N/A	Concrete	N/A	20 bbl AG Metal Vat	N/A	N/A	N/A metal lid
6. Waste Stop Oil	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7. Waste Lubrication and Motor Oils	Oils	Oils	N/A	N/A	N/A	N/A	N/A	55-gallon	ringed lid
8. Oil Filters	Oil	Oil	N/A	N/A	N/A	N/A	N/A	55-gallon	ringed lid
9. Solids and sludges from tanks (crude oil tank bottoms, sand, etc.)	N/A (cleaned at drill site location)	N/A (cleaned at drill site location)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10. Painting Wastes	Metals, caustic solution, degreaser	Metals, caustic solution, degreaser	N/A	N/A	AG Metal Vat - NP	N/A	N/A	N/A	Metal
11. Sewage (Sanitary)	Sanitary wastes only	Sanitary wastes only	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12. Other Waste Liquid	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13. Other Waste Solids	Municipal Trash	Municipal Trash	N/A	N/A	Dumpster	N/A	N/A	N/A	metal lid

and January 9, 1991 (Reference Nos. 1 and 7) and are discussed in Part IX.

2. Tankage and Chemical Storage Areas: Pre-Phase III Remedial Efforts Part IX. Section A summarizes proposed modifications to the tankage and chemical storage areas. Figure 3-1 shows the approximate location of each of the following tank and chemical storage areas:

- Bulk Fuel Dispensing Area - Aboveground Diesel Storage tanks (currently not in use)
- Solvent/Degreaser Storage
  - Cougar Degreaser
  - Safety Kleen Storage
- Paint and Paint Thinner Storage
- Compressed Gas Storage
- Lubricating, hydraulic or transmission oil storage

a. Bulk Fuel Dispensing Area: A 2,000-gallon steel aboveground bulk storage tank is used for the on-site dispensing of diesel fuel. The aboveground tank is not presently bermed per NM-OCD requirements.

b. Solvent/Degreaser Storage: HOMCO presently stores the following solvents/degreasers at the Hobbs, New Mexico facility:

- Cougar Degreaser
- Safety Kleen

Cougar degreaser and Safety-Kleen products are drummed (ringed 55-gallon) until used. Safety Kleen wastes are captured in spill trays and are drummed by HOMCO for future recycling by Safety

Kleen. The Safety Kleen drum storage area is not currently paved or curbed and does not drain into a sump system.

- c. Paint and Paint Thinner Storage: HOMCO stores gallon containers of paint in a metal storage locker within the shop portion of the subject facility. Paint thinner (xylene) and hardener is stored in a metal cabinet within the shop portion of the subject facility.
- d. Waste Oil Storage: Waste oils were formerly collected and stored in 55-gallon drums in the yard of the HOMCO facility. Lubricating oils are currently changed off-site; therefore a waste storage area is not necessary.
- e. Compressed Gas Storage: Cylinders of acetylene, oxygen and nitrogen are chained to the southeast corner inside of the HOMCO shop.
- f. Lubricating, hydraulic, and transmission oil storage: Lubricating oil is stored in a bulk 250-gallon aboveground storage tank (AST) in the south portion of the yard. Hydraulic oil is stored in a wooden cabinet in the southeast corner of the shop.

- 3. Integrity of Buried Pipelines in Facilities Greater Than 25 Years of Age.  
The subject facility was constructed in 1982 according to the City of Hobbs Building Department records and is not required to demonstrate the integrity of on-site buried piping.

C. Existing Effluent and Solids Disposal

1. On-site Facilities:

a. (1) Figure 3-1 shows the location of the on-site effluent and solids disposal areas. No surface impoundments exist at the subject facility.

(2) Leachfield/Leachpit: Prior to September 15, 1990, the on-site wastewater disposal system consisted of a below grade sump, underground holding tank (solids settling tank) and a leachpit connected via underground 4" PVC piping. The leachpit was 12 feet in diameter, 17 feet deep, constructed of discontinuous cinder block, and had no structural bottom. The leachpit was removed during February 1991 as part of remedial activities, as submitted to and approved by the NM-OCD on November 8, 1990. (Reference No. 3)

Nonhazardous contaminated soils, oily wastewaters, and sludges were disposed of at CRI in Halfway, New Mexico. (Reference No. 15)

(3) Injection Wells: There are no permitted or non-permitted injection wells at the subject facility, as defined by the NM-OCD.

(4) Drying Beds or Other Pits: There are no drying beds or other pits at the subject facility, as defined by the NM-OCD.

(5) Solids Disposal: Mud tanks were formerly cleaned in the easternmost corner. The approximate area was 100x40x10 feet.

This area, which has been inactive for approximately 6 years, was formerly used to accept runoff from on-site mud tank cleaning operations. The area was formerly bermed and was closed by collapsing the earthen berm, filling, and leveling to existing grade. The mud tank cleanout area was removed during the February 1990 remedial activities as submitted and approved by the NM-OCD on November 8, 1990 (Reference No. 3). Nonhazardous soils/wastes were disposed of at CRI in Halfway, New Mexico.

No sands, sludges, filters, containers, cans, or drums are currently disposed of on site.

b. Leachpit, Mud Tank Cleanout Area, Underground Holding Tank Area, Bulk Fuel Dispensing Area:

(1) The leachpit and mud tank cleaning area and UHT area have been remediated to the extent defined by the following ENSR Phase III correspondence to the NM-OCD:

<u>Area</u>	<u>NM-OCD Correspondence</u>
Leachpit	Reference Nos. 8, 10
Mud Tank Cleaning Area	Reference Nos. 8, 10
UHT #1 Area	Reference No. 10
AST Area	Reference No. 9

(2) The leachpit underground holding tank, and mud tank cleaning area are out of service and thus do not require effluent sampling.

(3) Proposed Monitoring or Leak Detection Systems

- UHT Area - The UHT associated with the former wastewater disposal system was removed during Phase III Remedial Activities.
- Proposed modifications are described in Part XI. A groundwater observation well is proposed for the UHT area and is described in Reference No. 13.
- Leachpit and Mud Tank Cleaning Area - Groundwater observation wells are proposed for the Leachpit and the Mud Tank Cleaning Areas and are described in Reference No. 13.

(4) The subject facility is currently operational and plans are to continue operations indefinitely. As such, post-operational monitoring is not applicable.

2. Off-site Disposal: HOMCO's oily wastewaters and sludges are pumped from the on-site temporary collection tank (mud tank) by a CRI approved vacuum truck service and disposed of at CRI in Halfway, New Mexico per the NM-OCD approval dated December 11, 1990. CRI is a NM-OCD permitted nonhazardous oilfield waste disposal facility.

Oily sludges that may be generated as a byproduct of the proposed modifications to the facility's wastewater disposal system shall also be sent to CRI after the system has been installed, appropriate analyses have been performed, and NM-OCD approvals have been obtained.

Waste oils are not stored on site. Oils are changed off-site at OS Quick Change in Hobbs, New Mexico.

IX. **Proposed Modifications to Existing Collection/Treatment/Disposal Systems**

A. **Collection and Storage System Modifications:**

1. **Oily Wastewater/Sludge Collection and Storage System Modifications**

HOMCO received NM-OCD approval of proposed modifications/new installations to the existing oily wastewater/sludge collection and storage system on September 10, 1990 and January 9, 1991 (Reference Nos. 1 and 7).

The proposed oily wastewater/sludge collection, recycling, and storage system is described in ENSR's letter to the NM-OCD dated December 12, 1990 (Reference No. 6).

The existing oily wastewater collection and storage system used at the subject facility is temporary (sump to mud tank to CRI). The proposed modifications shall be installed and constructed after sufficient data from sampling activities proposed in the NM-OCD approved "Workplan for Soils and Groundwater Investigations, HOMCO Site 135, Hobbs, New Mexico" dated April 1991, (Reference No. 13) has been evaluated.

2. **Tankage and Chemical Storage Modifications**

A bulk fuel dispensing depot is proposed for the subject facility. ENSR submitted construction plans for the depot to the NM-OCD on December 12, 1990 (Reference No. 6). NM-OCD approval was granted on January 9, 1991 (Reference No. 7).

A storage pad for drummed chemicals is proposed for the subject facility. Proposed pad designs shall be submitted to the NM-OCD upon completion of activities outlined in the Phase IV "Workplan for Soils and

Groundwater Investigations" (Reference No. 13). The data obtained in this investigation shall enable HOMCO to design the pads appropriately. Chemicals stored within the facility shall adhere to applicable OSHA, City of Hobbs Fire Department, and NM-OCD requirements.

B. Mud Tank Cleaning Area, Leachpit, Underground Holding Tank Area, Aboveground Storage Tank Area, Pipe Rattler Area, Miscellaneous Stained Area Closures/Modifications

The "Proposed Closure/Remedial Action Plan for HOMCO International, Inc. facility No. 135, Hobbs, New Mexico," submitted to the NM-OCD on October 12, 1990, describes the proposed closure of the mud tank cleaning area, leachpit, underground holding tank area, pipe inspection/coating area, and the miscellaneous stained areas at subject facility. The following information summarizes the activities performed to effect the actual closures of these areas.

1. MTC, UHT and Leachpit Areas:

The MTC, UHT, and Leachpit soils were excavated by AZTEC Building Systems of Norman, Oklahoma, transported by Tadd Trucking of Hobbs, New Mexico to CRI of Halfway, New Mexico for disposal and/or landfarming per NM-OCD approvals (Reference No. 11).

Soil samples were obtained from the sidewalls and bottom of the MTC, UHT and Leachpit excavations and analyzed for TPH (total petroleum hydrocarbons) and/or Total BTEX (benzene, toluene, ethylbenzene, xylene). ENSR submitted analytical data and requests for closure approval to the NM-OCD on February 10, 1991 and February 14, 1991 (Reference Nos. 8 and 10).

2. Miscellaneous Stained Areas and Pipe Coating/Inspection Area Modifications:  
The miscellaneous stained areas, including the pipe inspection and coating areas were excavated to depths ranging from 3.0 to 4.5 feet. Soil samples were obtained from the bottom of these excavations and analyzed for TPH. Verbal authorization to backfill these areas was given by Roger Anderson of the NM-OCD during the week of February 24, 1991.

Closure of the MTC, UHT, and leachpit areas was approved by the NM-OCD in February 14 and 20, 1991 telephone conversations. NM-OCD approval for backfilling of these areas was granted with the understanding that the actions/modifications requested of HOMCO in the NM-OCD correspondence dated February 25, 1991 (Reference No. 11) would be met. ENSR submitted the Phase IV Workplan (Reference No. 13) in response to this request.

**X. Inspection, Maintenance and Reporting**

Section 2 of the Spill Contingency Plan of Appendix A describes the schedule and reporting of operations.

**XI. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)**

As part of the HOMCO-Hobbs facility discharge plan, HOMCO submits a Spill Contingency Plan (Appendix A) to conform with the requirements of Section XI, Spill/Leak Prevention and Reporting Procedures, Subsections A. and B.

Section XI.C. does not apply to the subject facility since the HOMCO facility does not use an on-site injection well for on-site effluent disposal.

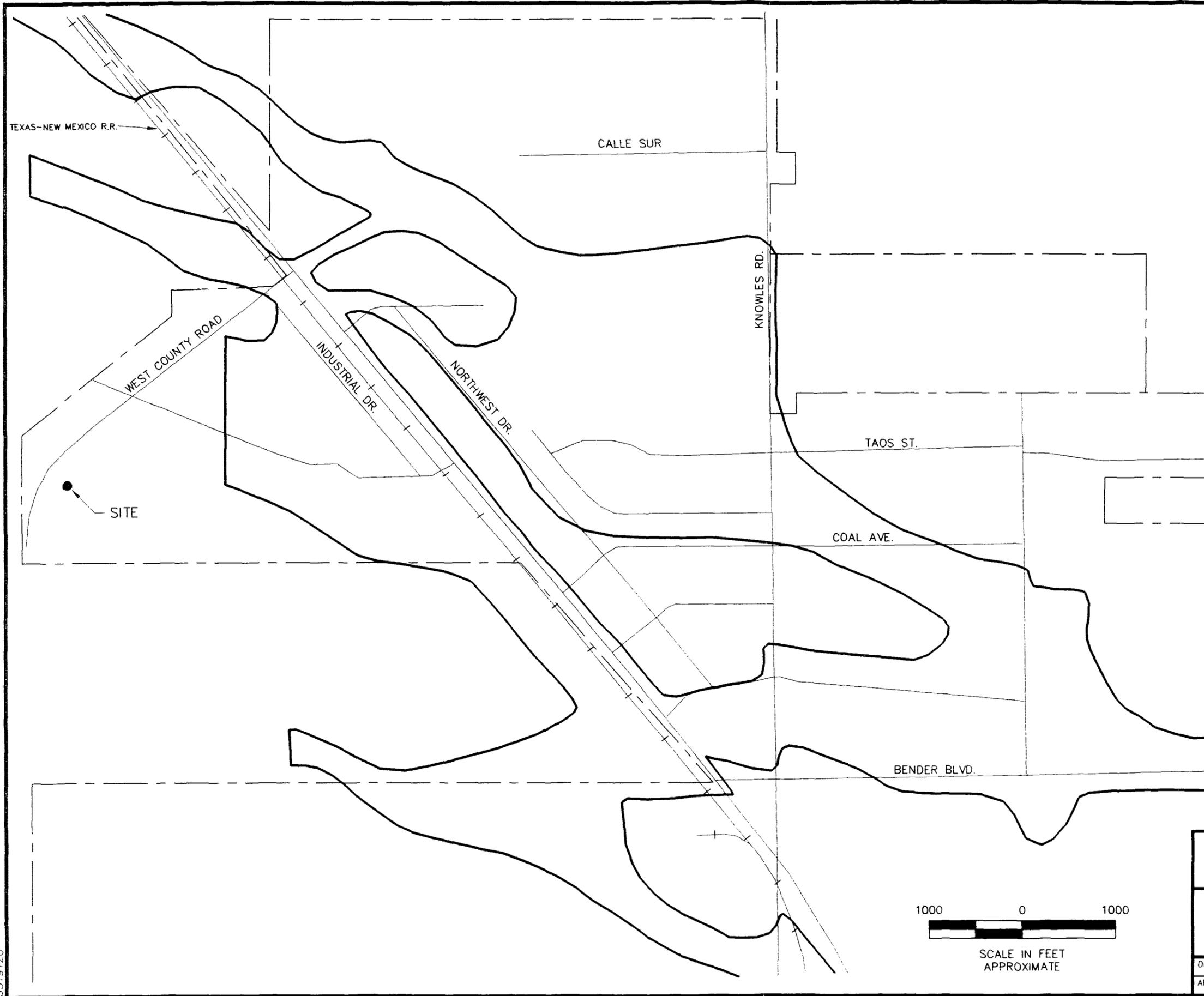
## XII. Site Characteristics

### A. Hydrologic/Geologic Information

1. (a) Water Bodies - Green Meadowlake approximately is 5,000 feet northeast of site
- (b) Water Wells
  - HOMCO International, Inc., Hobbs, NM on-site water well; industrial/drinking water supply;
  - Western Company of North America on-site water well; industrial/drinking water well. The Western Company of North America is adjacent to the HOMCO site.
2. Total Dissolved Solids Concentration in Groundwater:

This information shall be provided in detail in the report of the Phase IV - Soils and Groundwater Investigations - NM-OCD. A water quality analysis was performed on tap water from the on-site well. Data from the analyses is presented in Reference No. 2.
3. Driller's Log: Appendix B provides a driller's log of a water well on the Western Company of North America property located approximately 10-20 feet south of HOMCO's northern property line.
4. Flood Zone Information:
  - a. Flood Potential: The potential for flooding at the subject facility with respect to major precipitation appears to be minimal. Annual precipitation ranges from 12 to 14 inches. The subject site is located outside of the City of Hobbs Flood Zone.

- b. Flood Protection Measures: Proposed flood protection measures appear to be near Flood Zone A (Figure 4) and are described in Reference Nos. 1 and 7, and shall be described in future correspondence to the NM-OCD associated with the workplan described in Reference No. 3.
4. Additional Information: Additional information is not required because HOMCO is not requesting a permit for unlined surface impoundments, pits, and leachfields/leachpits. However, additional geologic/hydrogeologic information shall be submitted to the NM-OCD upon review of analytical data obtained in conjunction with the performance of the Phase IV activities as outlined in the workplan provided in Reference No. 13.

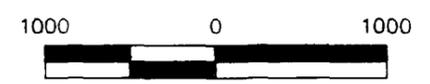


**LEGEND**

— FLOOD ZONE AREAS

NOTE:  
 THE SITE LOCATION IS OUT OF THE FLOOD ZONE AREAS.  
 THE FLOOD ZONE AREA SHOWN IS OF THE NORTHWEST PART OF HOBBS.

REFERENCE: FIRM FLOOD INSURANCE RATE MAP, CITY OF HOBBS, NEW MEXICO, PANEL 15 OF 15, EFFECTIVE DATE- APRIL 5, 1988.



SCALE IN FEET APPROXIMATE

**ENSR**<sup>TM</sup>  
 ENSR CONSULTING & ENGINEERING

FIGURE 12-1  
 FLOOD ZONE MAP  
 HOMCO INTERNATIONAL, INC.  
 HOBBS, NEW MEXICO

DRAWN: SJF	DATE: 6-20-91	PROJECT NUMBER:
APPV'D:	REVISED:	3519-006-135

3519126

**XIII. OCD Compliance Information**

The following correspondence between HOMCO/ENSR and the NM-OCD demonstrates HOMCO's proactive intent to comply with NM-OCD rules and regulations:

**1. ENSR/HOMCO correspondence to NM-OCD dated September 10, 1990.**

Re: Approval of Plans/Specifications of Proposed Wastewater Recycling/Disposal System, at HOMCO Hobbs, New Mexico Facility 135, and Request for Closure Proposal with Analytical Data Regarding Old UHT/Leachpit System.

**2. NM-OCD correspondence to ENSR/HOMCO dated October 12, 1990, Certified Mail No. P-9180-402-482.**

Re: Preliminary Site Assessment and Proposed Closure/Remedial Action Plan for HOMCO International, Inc., Facility No. 135, Hobbs, New Mexico.

**3. NM-OCD Correspondence to ENSR/HOMCO dated November 8, 1990, Certified Mail No. P-106-675-316.**

Re: Approval of ENSR/HOMCO's Preliminary Site Assessment and Proposed Closure/Remedial Action Plan.

**4. ENSR/HOMCO correspondence to NM-OCD dated December 5, 1990.**

Re: Request for NM-OCD Approval of Disposition of HOMCO - Hobbs Oily Wastewaters/Sludges at Controlled Recovery, Inc., (CRI), Halfway, New Mexico.

5. **NM-OCD correspondence to ENSR/HOMCO dated December 11, 1990, Certified Mail No. P-327-278-017.**

Re: Approval for Disposition of Oily Wastewaters/Sludges Generated from HOMCO - Hobbs Facility Temporary Wastewater Disposal System at CRI, Halfway, New Mexico.

Request for new analytical data from byproducts associated with proposed wastewater recycling system at HOMCO - Hobbs, NM facility.

6. **ENSR/HOMCO correspondence to NM-OCD dated December 17, 1990.**

Re: Request for NM-OCD review/approval of proposed wastewater recycling system construction plans/specifications.

7. **NM-OCD correspondence to ENSR/HOMCO dated January 9, 1991, Certified Mail No. P-327-278-036.**

Re: Approval of plans/specifications of proposed modifications/new installations of wastewater recycling system, Bulk Fuel Dispensing Depot, Rattler Building Water AST.

8. **ENSR/HOMCO Field Fax to NM-OCD dated February 10, 1991.**

Re: Request for NM-OCD guidance/approval for closure of UHT, MTC, and Leachpit Excavations.

9. **ENSR/HOMCO Field Fax to NM-OCD dated February 20, 1991.**

Re: Request for NM-OCD guidance/approval for closure of bulk dispensing area excavations.

**10. ENSR/HOMCO Field Fax to NM-OCD dated February 14, 1991.**

Re: Request for NM-OCD approval for disposal of soils excavated from UHT and Leachpit Areas.

**11. NM-OCD Correspondence to ENSR/HOMCO dated January 25, 1991, Certified Mail No. P-327-278-081.**

Re: Written confirmation of verbal approvals for backfilling/closure of UHT, leachpit, and bulk fuel dispensing area. Written confirmation for verbal approvals for disposition of soils excavated from UHT and Leachpit areas at CRI, Halfway, New Mexico. Approvals contingent upon 3 directives (Phase IV Workplan).

**12. NM-OCD correspondence to Conrad Lee of HOMCO - Hobbs, New Mexico, Facility No. 135, dated January 26, 1991, Certified Mail No. P-327-278-085.**

Re: Discharge Plan Request Notification - NM-OCD Directive for Service Companies.

**13. ENSR/HOMCO correspondence to NM-OCD dated March 1991.**

Re: Request for NM-OCD approval of ENSR document "Workplan for Soils and Groundwater Investigations, HOMCO Site 135, Hobbs, New Mexico."

**14. NM-OCD correspondence to ENSR/HOMCO dated 4/26/91, Certified Mail No. P-327-278-115.**

Re: Conditional approval of ENSR/HOMCO's "Workplan for Soils and Groundwater Investigations, HOMCO Site 135, Hobbs, New Mexico"

**15. NM-OCD C117A Permit Summary for TPH-Contaminated Soils Disposal**

Date	Owner	Transporter	Permit No.
2/5/91	HOMCO	Tadd Trucking	H-13914
2/14/91	HOMCO	Tadd Trucking	H-13942
2/18/91	HOMCO	Tadd Trucking	H-13947
2/22/91	HOMCO	Tadd Trucking	H-13970
2/22/91	HOMCO	Tadd Trucking	H-13971

**XIII. Certification**

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX A  
SPILL CONTINGENCY PLAN**

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## 1.0 INTRODUCTION

As part of the HOMCO-Hobbs facility discharge plan, HOMCO submits this Spill Contingency Plan to conform with the requirements of Section VI, Spill/Leak Prevention and Reporting Procedures, Subsections A. and B.

Section XI. C. does not apply to the subject facility because the HOMCO facility does not use an on-site injection well for on-site effluent disposal.

### 1.1 Introduction and Keys to Reporting Spills and Releases of Oil or Other Chemicals

#### 1.1.1 Purpose of The Manual

This Spill Contingency Plan (SCP) was prepared in accordance with federal and state requirements on prevention and control of spills of oil product and waste chemicals.

The SCP was prepared in compliance with the following federal and state regulations:

- Title 40 Code of Federal Regulations Part 112 (40 CFR 112), entitled "Oil Pollution Prevention, Nontransportation-Related Onshore and Offshore Related Facilities";
- Title 33 Code of Federal Regulations Part 153 (33 CFR 153), entitled "Coast Guard Regulations on Oil Spills, Control of Pollution by Oil and Hazardous Substances, Discharge Removal";
- Title 40 Code of Federal Regulations Part 302 (40 CFR 302), entitled "Notification Requirements; Reportable Quantity Adjustments"; and
- Sections 3-104 and 3-106 of the State of New Mexico Water Quality Control Commission (WQCC) Regulations enforced by the New Mexico Oil Conservation Division Rule 116 of the New Mexico Oil Conservation Division's Rules and Regulations entitled "Notification of Fire, Breaks, Leaks, Spills and Blowouts."

As required by Federal and State Regulations, this SCP will be reviewed and revised as needed each time there is any change in plant equipment or materials that affect oil or chemical substance spill potential, or reviewed at least every 3 years.

---

This SCP describes the HOMCO No. 135 facility in Hobbs, New Mexico. It also documents procedures and facilities for the release of oil and chemical substances.

### **1.1.2 Definition of Spills and Releases**

The federal and state regulations deal with releases into the environment in any of many forms including spills, leaks, emissions, discharges, dumpings, injections, etc. In this manual, the term spill has the same meaning as the broader term release, and refers to releases of any type.

### **1.1.3 Spills of Oil or of Hazardous Substances**

Different regulations deal with oil spills and with the chemical substance spills. However, the requirements are similar enough for both types of spills that the authorities (both federal and state) recommend a single contingency plan be prepared for both types of spills. Thus, this SCP Plan deals with both oil and chemical substance spills.

For the sake of clarity, each subject is handled separately where appropriate.

## **1.2 Description of HOMCO Facilities**

HOMCO International, Inc., is located at 3000 West County Road, Hobbs, New Mexico, in Lea County. The facility covers approximately 10.0 acres. Approximately 20% of the site is covered by buildings. The site is currently used for oilfield fishing tool rental, storage, and maintenance. Maintenance activities include steam cleaning, painting, machining, welding, pipe testing, and pipe coating.

Tubular goods and fishing tools are stored in the exterior storage yard. The east portion of the facility is used for pipe storage. The drilling mud tank storage is located in the west portion of the subject site. Blow-out preventer (BOP) storage and recirculation unit storage is situated along the north northwest property boundary.

---

## 2.0 OIL SPILLS

### 2.1 Definition

Oil in this document includes diesel, hydraulic oil, sludges, and oil mixed with other wastes.

A reportable oil spill is defined by federal authorities as any release of oil into public waters sufficient to:

- produce a sheen on or discoloration of the surface of the water;
- cause discoloration of a shoreline;
- cause a sludge or an emulsion to form in or under the water; or
- exceed the permit limits on any drainage or wastewater stream.

A more detailed definition of an oil or chemical substance spill is found in Rule 116 of the NMOCD "Rules and Regulations" as summarized below.

#### Rule 116. Notification of Fire, Breaks, Leaks, Spills and Blowouts

The Division shall be notified of any fire, break, leak, spill or blowout occurring at any injection or disposal facility or at any oil or gas drilling, producing, transporting, or processing facility in the State of New Mexico by the person operating or controlling such facility.

"Facility," for the purpose of this rule, shall include:

- any oil or gas well, any injection or disposal well, and any drilling or workover well;
- any pipeline through which crude oil, condensate, casinghead or natural gas, or injection or disposal fluid (gaseous or liquid) is gathered, piped, or transported (including field flow-lines and lead-lines but not including natural gas distribution systems);
- any receiving tank, holding tank, or storage tank, or receiving and storage receptacle into which crude oil, condensate, injection or disposal fluid, or casinghead or natural gas is produced, received, or stored;
- any injection or disposal pumping or compression station including related equipment;

- any processing or refining plant in which crude oil, condensate, or casinghead or natural gas is processed or refined; and
- any tank or drilling pit or slush pit associated with oil or gas well or injection or disposal well drilling operations or any tank, storage pit, or pond associated with oil or gas production or processing operations or with injection or disposal operations and containing hydrocarbons or hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong acids, or other deleterious chemicals or harmful contaminants.

Notification of such fire, break, leak, spill, or blowout shall be in accordance with the provisions set forth below:

- "Major" Breaks, Spills or Leaks. Notification of breaks, spills, or leaks of 25 or more barrels of crude oil or condensate, or 100 barrels or more of salt water, none of which reaches a watercourse or enters a stream or lake; breaks, spills, or leaks in which one or more barrels of crude oil or condensate or 25 barrels or more of salt water does reach a watercourse or enters a stream or lake; and breaks, spills or leaks of hydrocarbons or hydrocarbon waste or residue, salt water, strong caustics or strong-acids, gases, or other deleterious chemicals or harmful contaminants of any magnitude which may with reasonable probability endanger human health or result in substantial damage to property, shall be "immediate notification" described below.
- "Minor" Breaks, Spills or Leaks. Notification of breaks, spills, or leaks of 5 barrels or more but less than 25 barrels of crude oil or condensate, or 25 barrels or more but less than 100 "subsequent notification" described below.

IMMEDIATE NOTIFICATION. "Immediate Notification" shall be as soon as possible after discovery and shall be either in person or by telephone to the district office of the Division district in which the incident occurs, or if the incident occurs after normal business hours, to the District Supervisor, the Oil and Gas Inspector, or the Deputy Oil and Gas Inspector. A complete written report ("Subsequent Notification") of the incident shall also be submitted in duplicate to the appropriate district office of the Division within 10 days after discovery of the incident.

SUBSEQUENT NOTIFICATION "Subsequent Notification" shall be a complete written report of the incident and shall be submitted in duplicate to the district office of the Division district in which the incident occurred within 10 days after discovery of the incident.

CONTENT OF NOTIFICATION All reports of fires, breaks, leaks, spills or blowouts, whether verbal or written, shall identify the location of the incident by quarter-quarter, section, township, and range, and by distance and direction from the nearest town or prominent landmark so that the exact site of the incident can be readily located on the ground. The report shall specify the nature and quantity of the loss and also the general conditions prevailing in the area, including precipitation, temperature, and soil conditions. The report shall also detail the measures that have been taken and are being taken to remedy the situation.

WATERCOURSE, for the purpose of this rule, is defined as any lake-bed or gully, draw, stream bed, wash, arroyo, or natural or man-made channel through which water flows or has flowed.

## **2.2 Specific Applications to HOMCO**

An oil spill within HOMCO's plant limits is a reportable oil or chemical substance spill if the spill meets the definition of a spill as outlined in Rule 116 of the NM-ODC Rules and Regulations.

A spill of oil outside HOMCO's property is reportable by HOMCO only if:

- it is caused by personnel or equipment related to HOMCO, and
- it is into public waters.

Conversely, an oil spill outside HOMCO's property onto dry ground is not a reportable "spill into public waters" if it is completely cleaned up before rain can wash it into ditches draining to public waters. (If not completely cleaned up before rain washes it away, it is reportable by HOMCO if caused by HOMCO related personnel or equipment. Also, if slippery oil is spilled onto a highway it may be reportable to New Mexico authorities as a road hazard, even though the oil does not enter public waters.)

## **2.3 Potential Spills - Prevention and Control**

There is very low probability that a spill of oil into navigable waters could occur at the HOMCO facility for the following reasons:

- The storage tanks are located within a containment area.
- Drainage of the property is such that spills would be unlikely to migrate into navigable waters.

- Routine maintenance will include draining rain water and melted snow from the containment area and running through the proposed oil water separator.
- Trace oil spills resulting from normal operations will be contained immediately with absorbent materials by the following:
  - (i) Impervious containment area of sufficient volume to hold the entire contents of the largest tank plus 30%.
  - (ii) Curbing is used to confine accidental spills within operating units. Concrete slabs are sloped to provide effective confinement and drainage.

In the unlikely event of an appreciable oil spill during a rainstorm, oil could evade all these barriers, clean-up actions would be required for and are described in Section 4.0.

- Visual inspection of aboveground tanks and "grandfathered" sumps shall be performed biannually.
- Underground tanks (new or proposed) should be designed per NM-ODC requirements and monitored for leakage biannually.

For HOMCO, these regulations will apply to the following:

- (A) Spills and releases of caustic from the paint removal vat,
- (B) Spills and releases associated with the 2,000-gallon diesel storage tank,
- (C) Spills and releases associated with the hydraulic transmission, or lubricating oil storage drums.
- (D) Spills and releases of oily waste from steam cleaning operations,
- (E) Spills and releases of oily waste or sludge from the oil/water separator system,
- (F) Spills and releases of solvents associated with Safety Kleen equipment, and
- (G) Spills or releases of any hazardous substance outside of a closed building are reportable if the quantity is equal to or in excess of the reportable quantity.

---

Volatile fuels (gasoline, etc.) pose significant threats to people, equipment, and facilities. Anyone near a spill is in danger if the spill ignites. Buildings and equipment are also at risk.

NOTE: If uncertain about the need to report, contact Mr. Bob Medler, Director Environmental and Safety for HOMCO.

---

### 3.0 SPILLS AND RELEASES OF HAZARDOUS SUBSTANCES

#### 3.1 HOMCO Notification List

##### Spill Notification List

Robert Medler  
Director of Environmental and Safety  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252  
(713) 663-6444

Conrad Lee  
HOMCO Facility Manager  
3000 W. County Road  
Hobbs, New Mexico 88240  
(505) 393-3107

Should fire or explosion be involved:

City of Hobbs Fire Department  
Roland Weston, Fire Marshall  
Hobbs, New Mexico 88240  
(505) 397-7561

#### 3.2 Reporting Spills or Releases of Hazardous Substances

After the initial notification of a spill by telephone, use the Release or Spill Form to document all facts relating to the spill.

This report will be sent to the following:

United States Coast Guard (USCG) National Response Center (NRC)  
2100 Second Street, Room 2611  
Washington, D.C. 20593  
(Only if surface waters are involved.)

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and to

William LeMay, Director  
New Mexico Oil Conservation Division  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504  
(505) 827-5584

and to

Mr. Robert Medler, Director Environmental and Safety  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, Texas 77252  
(713) 663-6444

### **3.3 Evacuation Plans**

Should an emergency arise (fire, structural failure, explosion) that cannot be controlled by normal procedures, the on-scene coordinator, identified by HOMCO, will announce, via the internal paging system or other methods, to evacuate the building via the nearest exit. The exits are marked by EXIT signs.

### **3.4 Personnel Training**

Personnel will be trained on a semi-annual basis in Emergency Response Action. The Plant Manager will be responsible for the design, implementation and updating of a training program.

The program will include chain of command, action to be taken and equipment use should an emergency incident arise. It will also include possible types of emergencies and appropriate actions for each.

A log of the names of those receiving the training and the dates of the training sessions will be kept with the training file.

### **3.5 Record Keeping**

Use the following forms for recording information about the spill.

RELEASE OR SPILL REPORT FORM - HOMCO HOBBS, NEW MEXICO

Time and Date this Report Prepared \_\_\_\_\_ Name of Material Released or Spilled \_\_\_\_\_

To: Air \_\_\_\_\_ Ground \_\_\_\_\_ Public Waters \_\_\_\_\_ (Name of Water) \_\_\_\_\_

Time and Date Spill Discovered/Began \_\_\_\_\_

Quantity Spilled: Total \_\_\_\_\_ Max. in any 24 Hours \_\_\_\_\_

Other Pertinent Information About Release or Spill (Location, Cleanup Action, Etc.) \_\_\_\_\_

Name of Person Making Above Report \_\_\_\_\_

In making report, give all the above information

-----  
Person \_\_\_\_\_ making report to National Response Center (800) 424-8802.

Date of report \_\_\_\_\_ Time of report \_\_\_\_\_

Name of person answering \_\_\_\_\_

Remarks of person answering \_\_\_\_\_

-----  
Person \_\_\_\_\_ making report to NM-OCD at 505-827-5884

---

## 4.0 SPILL CLEAN UP

### Oil or Hazardous Substance Spill

Proceed immediately to cut off source, to prevent spill from spreading, and to clean up.

- The most immediate available help is that which is on site:
  - available personnel from Mechanical and Operations;
  - available equipment (drums, shovels, etc.) from Storehouse.

### 4.1 HOMCO - Spill Clean Up

Do not wash down the spill area with water. A wash-down has limited effectiveness and only moves the spill somewhere else, such as groundwater or a drainage system.

There are only two acceptable methods for dealing with a spill of the type most likely to occur at a HOMCO facility.

- Absorb the spill and remove the material from the area.
- Chemically emulsify the spilled material.

The most common method and the recommended method for HOMCO is to absorb the spilled material by applying dry granulated "kitty litter" or other absorbent material. This should involve diking the spill with the absorbent material and sweeping the spill with additional absorbent to the center of the spill for removal. Fiberglass or non-metallic shovels should be used to pick up the material.

The contaminated absorbent should be placed in 55-gallon drums or other suitable container for appropriate testing and analysis prior to disposal. Absorbing a flowable or chemical material will not render it inert.

Three things make a fuel spill a fire hazard:

- the size of the spill, and
- the type of fuel involved,
- amount of oxygen.

The exposed surface of a spill is important in that a larger surface area provides a greater vapor surface and a greater potential for ignition.

Gasoline grade spills should be considered extremely dangerous and may require notification of the local Fire Department.

Diesel grade spills can also be very dangerous. Diesel spills are sometimes considered stable because of their relatively high flash point (95 to 145 degrees Fahrenheit). However, in summer months, concrete and asphalt surfaces can hold sufficient heat to vaporize diesel creating an extremely dangerous situation for breathing or creating a fire hazard.

#### **4.2 Licensed Chemical or Liquid Waste Spill Removal Contractors**

Safety-Kleen Corp.  
3899 Wolf Road  
Saginaw, MI 48601  
(517) 753-3261

Additional contractors can be located through NM-EID.

#### **ENVIRONMENTAL CONSULTING FIRMS**

ENSR Consulting and Engineering  
3000 Richmond  
Houston, Texas 77098  
(713) 520-9900

#### **4.3 Advice from Chemtrec**

An unlikely, but possible, event is the spill of some chemical material inside or near HOMCO's property. An example would be the spill of a truck delivering or transferring of chemicals by another facility located near HOMCO.

---

If needed, advice on how to handle the spill can be obtained at any time from:

CHEMTREC  
(800) 424-9300

CHEMTREC is the name for the Chemical Manufacturers Association's Chemical Transportation Emergency Center. The telephone number is a toll-free 24 hour day "hot line."

When calling CHEMTREC, provide the pertinent information:

- Name of person and plant calling, and phone number
- Nature and location of the problem
- Chemical name and ID number (should be on the truck, front, back, and both sides)
- Local conditions (weather, etc.)
- Clean-up actions taken thus far
- Any shipping information, such as:
  - Shipper or manufacturer of chemical
  - Carrier name, and truck number or other identification
  - Consignee

---

## 5.0 SPILL RESPONSE PROCEDURES

### 5.1 Action to Take in Case of Oil or Solvent Spill or Spillage of Flammable Wastes

#### 5.1.1 First Action

Treat all spill material as flammable and hazardous until proven otherwise.

- A. Consider it explosive or flammable -- prevent any source from possibly igniting the liquid or vapors (e.g., smoking, electrical motor sparks, electrical equipment).
- B. Consider all spills as hazardous -- avoid contact with skin and eyes. Avoid breathing fumes. Avoid walking in the spill unless absolutely necessary.

#### 5.1.2 Second Action: Contain the spill.

- A. Use shovels or sorbent materials to dam the area.
- B. Use materials to absorb spilled oil, solvent or flammable waste.
- C. Pre-approved vacuum truck service may be useful to collect and transfer spilled material to drums until analysis and chemical characteristics have been determined.
- D. Prevent spillage from contaminating other materials.
- E. Recover the absorbent material for proper analysis disposal as solid potentially hazardous waste (55-gallon drum).

#### 5.1.3 Third Action: Immediately notify one of the HOMCO persons listed below:

Robert Medler  
Director of Environmental and Safety  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, TX 77252  
(713) 663-6444

Conrad Lee  
Facility Manager  
HOMCO International, Inc.  
3000 West County Road  
Hobbs, New Mexico 88240  
(505) 373-3107

#### **5.1.4 Fourth Action: Clean up efforts after release.**

- A. Check all areas of site for damage or leaks.
- B. Begin clean-up operations if possible.
  - Vacuum Trucks obtained after approval from HOMCO facility manager
  - Absorbent Materials
- C. Clean all safety and protective equipment and replace in working order.
- D. File all necessary reports and complete log describing the event.

The Emergency Coordinator for the facility is Conrad Lee, Facility Manager. He is familiar with all aspects of the operations at the site and emergency procedures, and has the authority to enact the provisions of this Contingency Plan.

##### **5.1.4.1 Spill Control Equipment On-Site**

Sorbent materials (granular) and miscellaneous tools shall be available at the plant for immediate deployment, should a spill occur. New, clean, empty and previously non-used 55-gallon metal drums shall be available for disposing of all used sorbent material and may be purchased from Permian Drum and Container in Odessa, Texas.

Granular absorbents can be spread on small spills, then shovelled up and into regular solid waste bins or 55-gallon drums for disposal.

Granular absorbents should be kept on hand at all times.

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### 5.1.5 Fifth Action: Notification

Robert Medler  
Director of Environmental and Safety  
HOMCO International, Inc.  
P.O. Box 2442  
Houston, TX 77252  
(713) 663-6444

Should fire and/or explosion be involved:

City of Hobbs Fire Department  
Hobbs, New Mexico 88240  
(505) 397-7561

Should soil and/or ground water contamination be involved:

William LeMay or  
Roger Anderson  
New Mexico Oil Conservation Division  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504  
(505) 827-5884

### 5.2 Personnel Training

Personnel will be trained on a semi-annual basis in Emergency Response Action. The Plant Manager will be responsible for the design, implementation and updating of a training program.

The program will include chain of command, action to be taken and equipment use should an emergency incident arise. It will also include possible types of emergencies and appropriate actions for each.

A log of the names of those receiving the training and the dates of the training sessions will be kept with the training file.

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**5.3 Licensed Chemical or Liquid Hazardous Waste Spill Removal Contractors**

Safety-Kleen Corp.  
3899 Wolf Road  
Saginaw, Michigan 48601  
(517) 753-3261

Additional contractors can be located through NM-EID.

**5.4 Potential Spills - Prevention and Control**

Conrad Lee  
Facility Manager  
HOMCO International, Inc.  
3000 W. County Road  
Hobbs, New Mexico 88240  
(505) 393-3107



**HOMCO International, Inc.**

Bellaire, Texas



Workplan for Soils and  
Groundwater Investigations  
HOMCO Site 135  
Hobbs, New Mexico

Submitted to:

State of New Mexico  
Energy, Minerals, and  
Natural Resources Department  
Oil Conservation Division

**ENSR Consulting and Engineering**

**April 1991**

**Document Number 3519-006-135**

APR 9 8 52 AM '91

OIL CONSERVATION DIVISION  
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## 1.0 INTRODUCTION

### 1.1 Summary

This work plan presents the methods to be used during a soils and groundwater investigation at Homco Facility No. 135 in Hobbs, New Mexico. This work plan has been developed in response to a letter from Mr. Roger C. Anderson (State of New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division) to Ms. Darlene Venable (ENSR Consulting and Engineering, Houston, Texas) dated February 25, 1991 (Appendix A). That letter required the following actions:

1. Installation of observation wells at the site of the former leach pit and at the former underground holding tank #1 (UHT #1) to determine if chemicals have migrated to the water table.
2. Determination of the lateral extents of chemicals beyond the excavation limits of the former leach pit and former UHT #1 through coring or other investigation programs.
3. Determination of the concentrations of chemicals close to the property line south of the bulk fuel dispensing area.

The following scope of work has been developed in response to these requests. The scope of work has been expanded in accordance with HOMCO's desire to fully determine the potential effects of these former facilities on soils and groundwater.

#### Groundwater Investigation

- Installation of four observation wells.
- Slug testing the observation wells (if field screening suggests the presence of chemicals in groundwater).
- Analyses of groundwaters from the observation wells and two water supply wells for volatile organic compounds including methyl tertiary butyl ether, semi-volatile organic compounds, and total petroleum hydrocarbons.

---

### Soils Investigation

- Drilling and sampling between seven and 21 borings in the area of the former leach pit and the former UHT #1.
- Analyses of soil samples for benzene, toluene, ethyl benzene, xylenes and total petroleum hydrocarbons. Analyses of select soil samples for volatile organic compounds, semi-volatile organic compounds, total organic carbon, and bulk dry density.

Section 2.0 presents the well installation and sampling program. Section 3.0 presents the soil boring program. Section 4.0 presents the schedule for this work.

#### **1.2 Facility Owner**

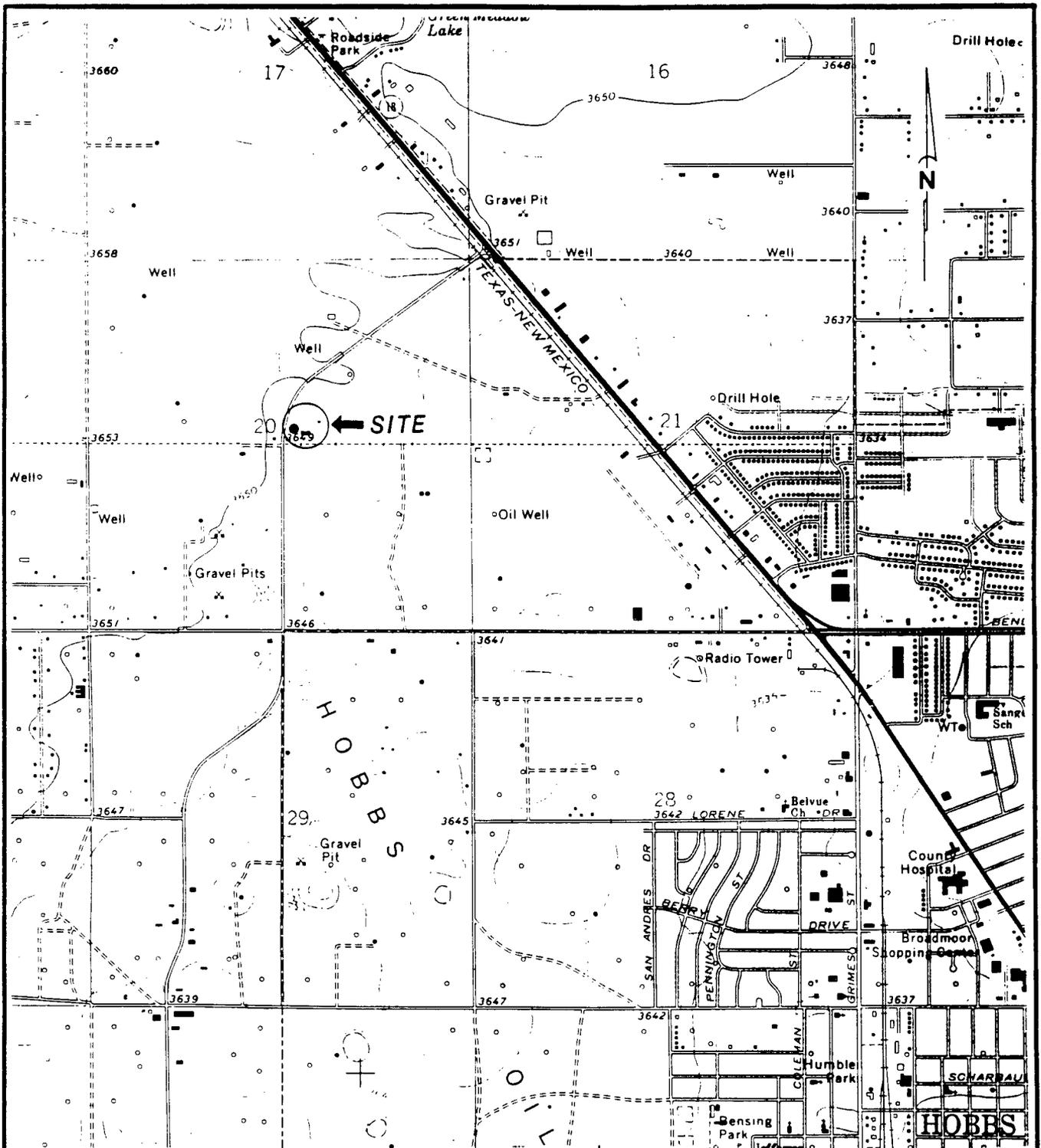
- Name: HOMCO International, Inc.
- Address: P.O. Box 2442  
Houston, TX 77252
- Phone: (713) 663-6444

#### **1.3 Site Location**

- Address: 3000 West County Road  
Hobbs, New Mexico 88240
- County: Lea
- U.S.G.S.  
Quad Map: Hobbs West, New Mexico
- Township 18 South Range 38 East, SW 1/4 of SW 1/4 of NE 1/4 of Section 20  
(See Figure 1-1 - Site Location Map)

#### **1.4 Business Conducted at the Facility**

HOMCO International, Inc. provides on and off-site support services to the oil and natural gas industry. On-site services include the maintenance and storage of a variety of rental equipment, including fishing and cutting tools. HOMCO's inventory of rental tools includes, but is not limited to: blowout preventers, drill pipe, drill collars, washover pipe, kelleys, slips, elevators, jars, pumping units, accumulator tanks, and reverse osmosis units.



Ref.: USGS Hobbs West, N. Mex. Quadrangle Map, 1979.

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**FIGURE 1-1**  
**SITE LOCATION MAP**  
**HOMCO SITE NO. 135**  
**HOBBS, NEW MEXICO**

<b>DRAWN BY:</b> S.SAWYERS	<b>DATE:</b> 6-26-90	<b>PROJECT NUMBER:</b>
<b>CHK'D BY:</b>	<b>REVISED:</b>	<b>3519-001-135</b>

Onsite high pressure steam cleaning is performed on the tools subsequent to each rental usage. Steam cleaning produces steam which removes residual soils, crude oils, and drilling fluids from the used rental tools. Prior to September 24, 1990, HOMCO's wastewater disposal system consisted of an interior concrete-lined sump, a concrete flow-through underground tank, a discontinuous/cinder block lined leachpit, and associated piping.

---

## 2.0 GROUNDWATER INVESTIGATION

Objectives of the groundwater investigation will be the following:

- Determine the concentrations of volatile organic compounds including methyl tertiary butyl ether (MTBE), semi-volatile organic compounds, and total petroleum hydrocarbons (TPH) in groundwaters underlying the former leach pit, the former UHT #1, the former bulk fuel dispensing area, the former mud tank cleaning area, and in two water supply wells.
- Determine the direction of groundwater flow.
- If the indicated chemicals are found in groundwater, estimate the average linear groundwater flow velocity and the retarded rates of chemical migration in the groundwater.

These objectives will be met by the following field activities:

- installation of four observation wells;
- sampling the observation wells and two water supply wells for chemical analyses;
- slug testing the observation wells (if field screening suggests the presence of chemicals in groundwater);
- surveying the observation well and water supply well locations and elevations; and
- measuring fluid levels.

### 2.1 Well Locations

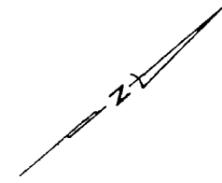
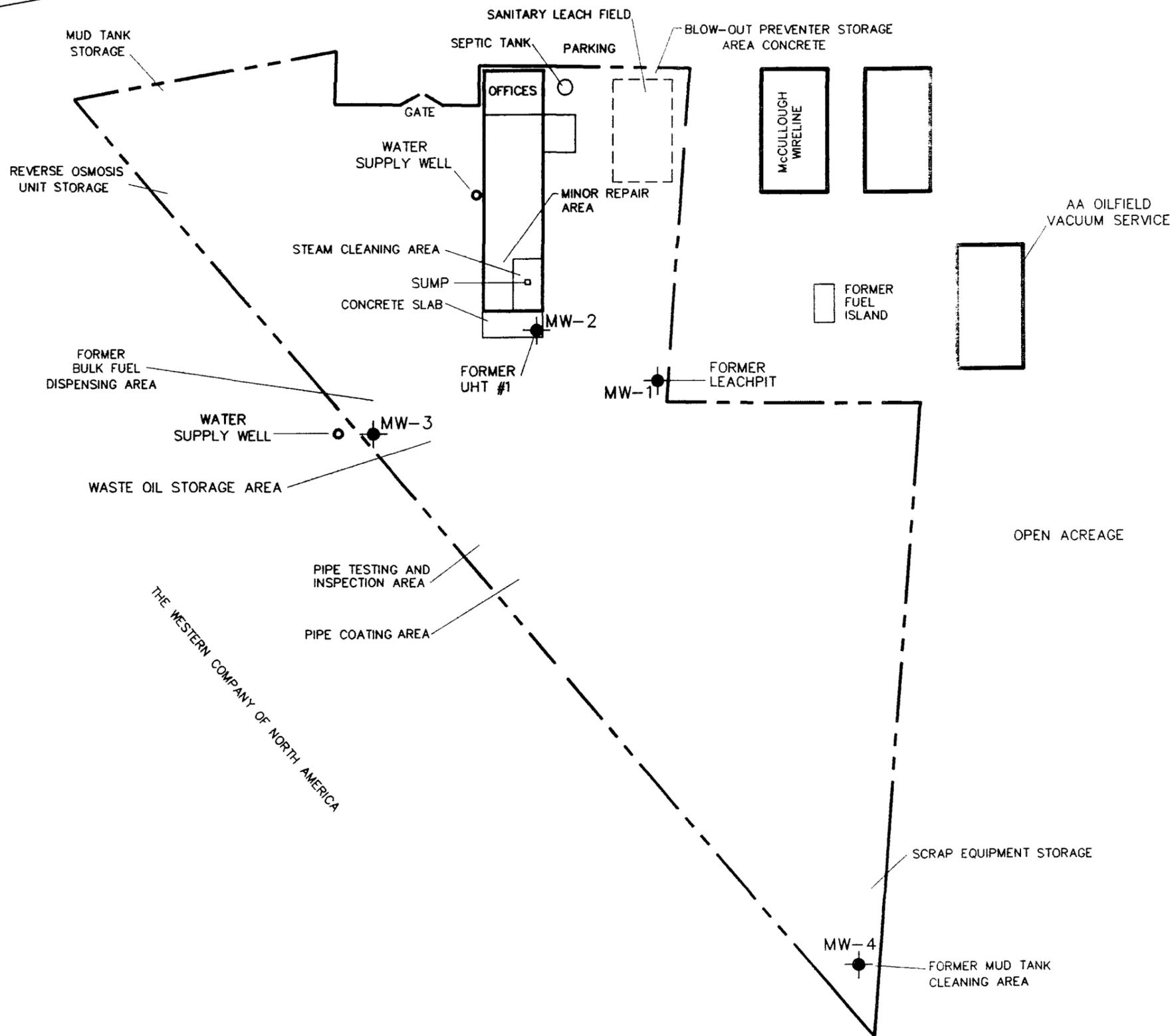
Figure 2-1 presents the locations of the wells. Wells MW-1, MW-2 and MW-3 will be installed to determine if chemicals are present in groundwater beneath the former leach pit, the former UHT #1 and the former bulk fuel dispensing area respectively. Well MW-4 will determine if chemicals are present in groundwater beneath the former mud tank cleaning area and it will aid delineation of the hydraulic gradient.

### 2.2 Drilling and Observation Well Installation

Drilling will be performed with a truck mounted, hollow stem auger rig. Soil and caliche will be continuously sampled with split spoon, continuous tube, or rock core samplers.

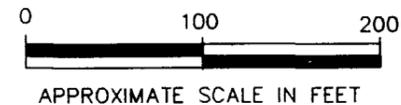
WEST COUNTY ROAD

WM. BILLY WALKER TRUCKING



**LEGEND:**

- MW-1 = PROPOSED OBSERVATION WELL
- UHT = UNDERGROUND HOLDING TANK



<b>ENSR™</b> ENSR CONSULTING AND ENGINEERING		
FIGURE 2-1 OBSERVATION WELL LOCATIONS HOMCO SITE NO. 135 HOBBS, NEW MEXICO		
DRAWN BY: SJ/SJF	DATE: 3-21-91	PROJECT NUMBER:
CHK'D BY:	REVISED:	3519-006-135

CE351988

Soil samples will be described in the field by an ENSR geologist using the Unified Soil Classification System. Caliche samples will be described using Dunham's classification system (1962), modified using descriptive terms presented in Bretz and Horberg (1949). All soil and caliche samples will be stored on-site in plastic core bags for potential future use. Observations will be recorded in a field book. Soil sampling intervals and parameters for chemical analyses are described in Section 3.0.

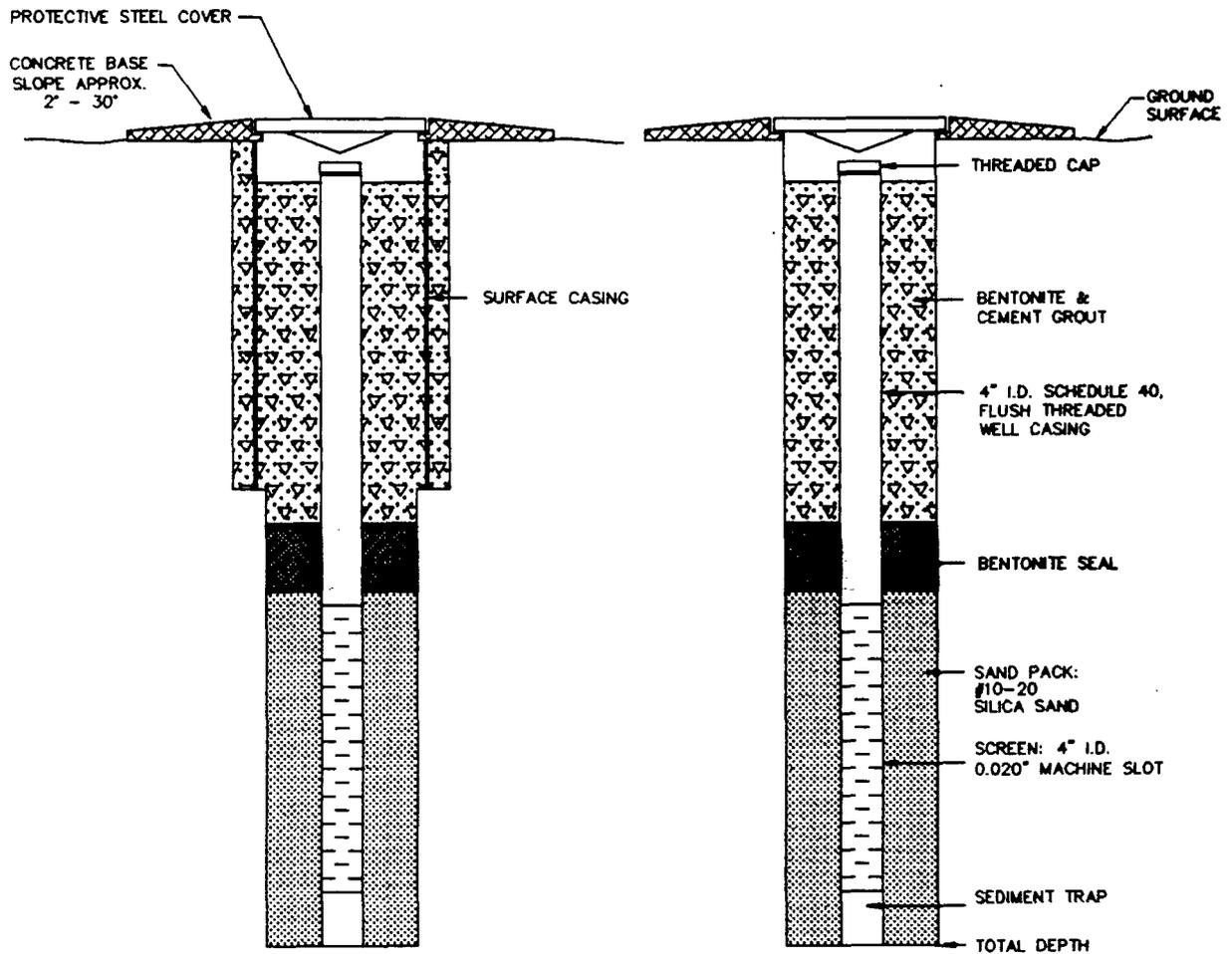
In addition to lithologic descriptions, soil and caliche samples will be logged using the following observations:

- structures and cracks;
- presence of fluids;
- discoloration (including select photographs);
- odor; and
- analyses of headspace every 5 feet with a photoionization detector (OVM brand).

A headspace reading will be made by half filling a 16 oz. wide mouth jar with sample, covering the opening with aluminum foil, screwing on the cap, placing the jar in a stable temperature environment (e.g. an air conditioned room or cooler, measure the temperature), and waiting for one hour. After one hour, the cap will be carefully removed and the foil cover will be pierced by the OVM intake. The recorded reading will be the highest measurement made. The OVM will be calibrated once a day. Jars may be reused between holes as long as they are decontaminated with soap and water, followed by a hot water rinse. Decontamination will be verified by OVM measurements.

The borings will be continued until field observations do not indicate the presence of chemicals or to 13 feet below the water table, whichever is deepest. If field screening indicates that "clean" conditions are attained before the water table is reached, drilling will cease, the boring will be reamed to a 12 inch diameter, and surface casing will be set. The surface casing will be tremie grouted in place with neat cement containing approximately 5% bentonite powder. The grout will be allowed to set for at least eight hours and drilling will re-commence.

After termination of soil sampling, the boring will be reamed to at least 13 feet below the water table to allow for observation well installation. Figure 2-2 presents a typical observation well installation. Wells will be made from Schedule 40, flush threaded PVC casing and screen. A well, from bottom to top, will consist of a 2.5 foot sediment trap sealed with a PVC cap. The sediment trap will be threaded to 15 feet of 0.020 inch, machine slotted well screen. Ten feet of the screen will be positioned below the water table and five feet of screen will be above the



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FIGURE 2-2  
TYPICAL OBSERVATION WELL  
INSTALLATIONS

HOMCO  
HOBBS, NEW MEXICO

DRAWN BY: SJ/LMG

DATE: 3-21-91

PROJECT  
NUMBER:

CHK'D BY: .....

REVISED:

3519-006-135

CE 351990

water table. The screen will be threaded to casing which will rise to within approximately 6 inches of the surface. The lip of the casing will be notched for the elevation survey and the casing will be sealed with a locking cap. The subsurface top of casing and cap will be protected with a flush-with-surface, bolt-down manhole.

The annular space between the well string and the borehole will be filled, from bottom to top, in the following way. The interval from the sediment trap to two feet above the top of screen will be tremie filled with 10-20 sand pack. A two foot thickness (minimum) of bentonite will be placed above the sand pack. Water will be added to the borehole to aid in bentonite hydration. After at least 4 hours, a neat cement grout containing approximately 5% of bentonite powder will be tremie installed from the top of the bentonite seal to the surface. The flush-with-surface manhole will be set in the grout. After the grout has set, the hole will be topped off with concrete.

All downhole drilling equipment will be steam cleaned before mobilization to a new drilling location. All drilling cuttings and fluids will be placed in 55 gallon drums for off-site disposal. All activities will be conducted in accordance with the site Health and Safety Plan (October, 1990).

### **2.3 Well Development and Survey**

The observation wells will be developed no sooner than two days after installation using the following methods. The entire length of the well screen will be "swabbed" with a manually operated surge block. This will be followed by pumping the well for a minimum of five well volumes. The discharge water will be monitored for turbidity (visual), temperature, pH and specific conductance. Pumpage will continue until these parameters have proven stable for at least three well volumes. All development data will be recorded in a field book. Figure 2-3 is an example of a well development record form.

All downhole development equipment will be stream cleaned between each well. All produced waters will be collected in 55 gallon drums for off-site disposal.

Each observation well and the two water supply wells will be surveyed to provide elevations precise to the nearest 0.01 foot within the U.S.G.S. 1969 datum. This elevation will be measured from a notch on the lip of each well casing. Each well location will be surveyed, precise to the nearest 0.1 foot, to provide coordinates within a site coordinate system. These surveys will be made by a surveyor licensed in New Mexico.



---

## 2.4 Slug Tests

If field observations indicate that chemicals are present in groundwater, each observation well will be slug tested after development. Slug test data will be used to estimate hydraulic conductivity of the aquifer. Each slug test will be performed by the following steps:

1. Lower an Insitu brand pressure transducer down the well and submerge the transducer approximately 15 feet. Link the transducer to a data logger and record the static water level.
2. Submerge a "slug" which is capable of displacing the water column by at least 5 feet. Construct the slug of clean PVC filled with sand and distilled water and capped at both ends.
3. Measure well water levels until they have returned to the static level.
4. Start the data logger on a logarithmic recording schedule. Rapidly (e.g. within one second) pull the slug out of the water column and remove it from the well.
5. Continue measuring water levels until they have recovered to the static level.
6. Interpret the data using the Bouwer and Rice (1976) method.

All details of the slug test will be recorded in a field book. Data from the logger will be "dumped" to a printer or laptop computer in the field to ensure that at least two copies of the data are available prior to leaving the field. The "slug" and pressure transducer will be steam cleaned between use in each well and dedicated rope will be used in each well.

## 2.5 Sampling Procedures

One round of groundwater sampling will be conducted on the observation wells and the water supply wells. This round will occur approximately four weeks after observation well development. Sampling will be delayed for this time to allow aquifer disturbances from drilling (e.g. aeration and volatilization) to dissipate. Prior to sampling, fluid levels and total depths will be measured from each observation well. If possible, fluid levels will be measured from the water supply wells. Fluid levels will be measured from the survey notch with a calibrated device capable of detecting separate, non-aqueous phases. The fluid level data will be used for the following:

- calculate well volumes;
- determine if non-aqueous phases (light or dense) are present; and
- construct a potentiometric surface.

Prior to sampling, each water supply well will be inspected. Figure 2-4 is an example of the form which will be used. A water supply well will be sampled from a valve located before filters, heaters or tanks in the distribution system (if possible). Prior to sampling, the well will be pumped until temperature, pH and specific conductance measurements have stabilized. Samples will be "dribbled" into bottles to avoid loss of volatile compounds.

A plastic sheet will be placed on the ground surface around each observation well. This sheet will be used to collect spilled fluids. A well will be evacuated with a submersible pump attached to dedicated discharge hose. The discharge water will be monitored for temperature, pH and specific conductance. Evacuation will continue until three well volumes have been removed or the measured parameters have been stabilized, whichever is the greater volume. Samples will be collected immediately after purging with a dedicated Teflon® bailer from the midpoint of the submerged screened interval. Water samples will be collected from the bailer through a valve assembly on the bottom of the bailer. If a separate phase is detected, this material will also be sampled, if possible. Sample vials will be wrapped in protective material to prevent breakage, and placed in rigid, thermally-insulated coolers. Sealed bags of ice will be packed into the coolers. The coolers will be sealed and shipped to the analytical laboratory, preferably on the same day as the samples are collected.

All non-dedicated, downhole sampling equipment will be decontaminated between each well using the following steps:

- acetone rinse;
- non-phosphate soap scrub;
- hexane rinse;
- deionized water rinse; and
- aluminum foil wrap.

All produced fluids and assorted trash (e.g. gloves and rope) will be placed in 55 gallon drums for offsite disposal. All sampling activities will be recorded in a field book. Figure 2-5 is an example of the sampling data which will be recorded. Figure 2-6 is an example of a sample label. Figure 2-7 is an example of a chain-of-custody form.

## **2.6 Analytical Parameters and Quality Assurance/Quality Control**

Sampled groundwaters will be analyzed for the parameters of Table 2-1. The sample vials for volatile analyses will be filled from the first bailer of water removed from the well. To ensure the reliability of field and analytical data, one trip blank, one equipment blank, and one field duplicate

GROUND WATER WELL INSPECTION FORM

Well: \_\_\_\_\_

Location Map

Project Name: \_\_\_\_\_  
Project Location: \_\_\_\_\_  
Project Number: \_\_\_\_\_  
Inspector: \_\_\_\_\_  
Affiliation: \_\_\_\_\_  
Date: \_\_\_\_\_

(north arrow, scale, land uses, camera angles)

LOCATION

Identification Markings: \_\_\_\_\_  
Estimated Township and Range Location: \_\_\_\_\_  
Surveyed Coordinates: \_\_\_\_\_  
Surveyed Ground Elevation: \_\_\_\_\_  
Surveyed Casing Elevation: \_\_\_\_\_  
Casing Elevation Bench Mark: \_\_\_\_\_

Well Owner

Land Owner

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone \_\_\_\_\_

ACCESS

Locks/Security: \_\_\_\_\_

Access Control

Key Custody

Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone \_\_\_\_\_

WELL HISTORY

Installation Date: \_\_\_\_\_  
Driller and Phone #: \_\_\_\_\_  
Original Use: \_\_\_\_\_  
Present Use: \_\_\_\_\_  
Frequency of Use: \_\_\_\_\_  
Abandonment/Destruction Date: \_\_\_\_\_

WELL CONSTRUCTION

Lithologic log and Cons. Details Available? (please attach): \_\_\_\_\_  
Surface Seal Type/Condition (e.g. cracks, subsidence): \_\_\_\_\_

Protective Casing: \_\_\_\_\_  
Riser Height: \_\_\_\_\_  
Casing Diameter and Material: \_\_\_\_\_  
Evidence of Damage or Tampering: \_\_\_\_\_  
Pump Type: \_\_\_\_\_  
Water Level and Sampling Access: \_\_\_\_\_  
Clearance Between Pump Riser and Casing ID: \_\_\_\_\_

TOTAL DEPTH Expected: \_\_\_\_\_ Actual: \_\_\_\_\_  
Depth to Water: \_\_\_\_\_

NOTES

Film Roll #: \_\_\_\_\_  
Exposure #: \_\_\_\_\_



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FIGURE 2-4  
EXAMPLE OF A  
WELL INSPECTION FORM

DRAWN BY: L. GAMBLE DATE: 3-21-91 PROJECT NUMBER: 3519-006-135  
CHK'D BY: \_\_\_\_\_ REVISED: \_\_\_\_\_

Project No.: \_\_\_\_\_ Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_

Sample No.: \_\_\_\_\_ Sample Location: \_\_\_\_\_  
Weather Conditions: \_\_\_\_\_

Well Evaluation and Observations:

Material: \_\_\_\_\_ Diameter: \_\_\_\_\_  
Vented: \_\_\_\_\_ Capped: \_\_\_\_\_  
Notched: \_\_\_\_\_ Lock: \_\_\_\_\_  
Cement Pad: \_\_\_\_\_ Protective Casing: \_\_\_\_\_  
Comments: \_\_\_\_\_

Well Data:

Total Depth: \_\_\_\_\_ ft.  
Depth to Fluid: \_\_\_\_\_ ft.  
Depth to Water: \_\_\_\_\_ ft.  
Height of Floater: \_\_\_\_\_ ft.  
Height of Water Column: \_\_\_\_\_ ft.

Well Evacuation:

Beginning Time: \_\_\_\_\_ End Time: \_\_\_\_\_  
Method: \_\_\_\_\_  
Volume Purged: \_\_\_\_\_ gal.

Sampling Data:

Beginning Time: \_\_\_\_\_ End Time: \_\_\_\_\_  
Method: \_\_\_\_\_

Sampling Depth/Interval \_\_\_\_\_ ft.

Field Measurements:

pH(1): \_\_\_\_\_ Specific Cond. (1): \_\_\_\_\_ T(°C) \_\_\_\_\_  
pH(2): \_\_\_\_\_ Specific Cond. (2): \_\_\_\_\_  
pH(3): \_\_\_\_\_ Specific Cond. (2): \_\_\_\_\_  
pH(4): \_\_\_\_\_ Specific Cond. (2): \_\_\_\_\_

Sampler Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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FIGURE 2-5  
EXAMPLE OF A  
SAMPLING RECORD

DRAWN BY: L.GAMBLE	DATE: 3-21-91	PROJECT NUMBER:
CHK'D BY: _____	REVISED:	3519-006-135

**ENSR CONSULTING AND ENGINEERING LABORATORIES ©**

PROJ #:		PROJ NAME			
LOCATION					
DATE	TIME	GRAB		COMPOSITE	
PRESERVATIVE			DEPTH		
LAB NO.			FIELD ID NO.		
ANALYSES REQUESTED/COMMENTS					
SAMPLER SIGNATURE					



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FIGURE 2-6  
EXAMPLE OF A SAMPLE LABEL

DRAWN BY: L.GAMBLE	DATE: 3-21-91	PROJECT NUMBER:
CHK'D BY: <i>D.M.</i>	REVISED:	3519-006-135



will be submitted for the analyses of Table 3-1. The trip blank will consist of deionized water which will accompany the sample vials to the field and the filled vials to the laboratory. The equipment blank will be collected by pouring deionized water into a sampling bailer prior to use in a well. Water will then be collected from the bailer in the same fashion as that for groundwater samples. The duplicate sample will be collected concurrently with a groundwater sample.

Equipment used to measure pH, specific conductance and temperature will be calibrated in the field. The validities of analytical data will be determined prior to interpretation by following the procedures of the Site Quality Assurance/Quality Control Plan (January, 1991).

**Table 2-1**

**PARAMETERS AND METHODS FOR ANALYSES OF GROUNDWATER SAMPLES**

<u>Parameter</u>	<u>Preservative</u>	<u>Test Method</u>
pH	None	Field Measured
Specific Conductance	None	Field Measured
Temperature	None	Field Measured
Volatile Organic Compounds plus MTBE	Cool to 4°C	EPA-600/4-88/039 524 <sup>(1)</sup>
Semi-Volatile Organic Compounds	Cool to 4°C	EPA-600/4-88/039 525 <sup>(2)</sup>
Total Petroleum Hydrocarbons	HCL/4°C	EPA-600/4/79-020 418.1

<sup>(1)</sup> The specific volatile organic compounds analyzed are those found on the Target Compound List from the USEPA Contract Laboratory Program Statement of Work, 10/86, Rev. 7/87. If headspace measurements or odor indicate the presence of chemicals, the SW-846 8240 method will be used. However, the compounds of the 524 method will still be identified.

<sup>(2)</sup> The specific semi-volatile organic compounds analyzed are those found on the Target Compound List from the USEPA Contract Laboratory Program Statement of Work, 10/86, Rev. 7/87. If headspace measurements or odor indicate the presence of chemicals, the SW-846 8270 method will be used.

**2.7 Data Interpretation**

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Data interpretation will be used to determine the following:

- The direction of groundwater flow.
- If the indicated chemicals are found in groundwater, the average linear groundwater flow velocity and the retarded rates of chemical migration in the groundwater.

Regionally, groundwater may flow to the southeast. However, the two water supply wells may have locally altered the direction of flow. Static water levels from the four observation wells will be contoured to determine the direction and magnitude of the hydraulic gradient. Isotropic conditions will be assumed unless lithologic logs suggest otherwise. Therefore, the direction(s) of groundwater flow will be assumed perpendicular to the equipotential lines.

Average linear groundwater velocities will be estimated by dividing a calculated Darcy velocity by an effective porosity. The effective porosity will be estimated from the graphs of Todd (1980). These graphs compare total porosity to effective porosity. Total porosity will be determined from soil bulk dry densities measured during the program described in Section 3.3.

If chemicals are present in groundwater, their migration is retarded by sorption to organic carbon present in the aquifer. Soil total organic carbon measurements (Section 3.3) will be used to calculate retardation factors for detected chemicals. Empirical relationships (e.g. Lyman et al., 1982) will be used to perform these calculations. The retardation factors will be used to estimate the slower migration rates of dissolved chemicals, if any.

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### 3.0 SOIL BORING PROGRAM

The objectives of the soil boring program will be the following:

- Determine which volatile and semi-volatile organic compounds are present in soils and caliche beneath the former leach pit, the former UHT #1 and the former bulk fuel dispensing area.
- Determine the lateral and vertical distributions of BTEX and TPH in soils and caliche at and above the water table which may be attributed to the former leach pit and the former UHT #1.
- Determine the concentrations of BTEX and TPH in soils and caliche at and above the water table near the fence line, south of the former bulk fuel dispensing area.
- Provide soil geotechnical information which will aid the data interpretations of Section 2.7.

These objectives will be met through a program which may include between seven and 21 borings in addition to those for observation wells.

#### 3.1 Boring Locations

Figure 3-1 presents preliminary locations of the soil borings. Each boring location will be inspected by a HOMCO representative before drilling to ensure that no underground conduits are encountered.

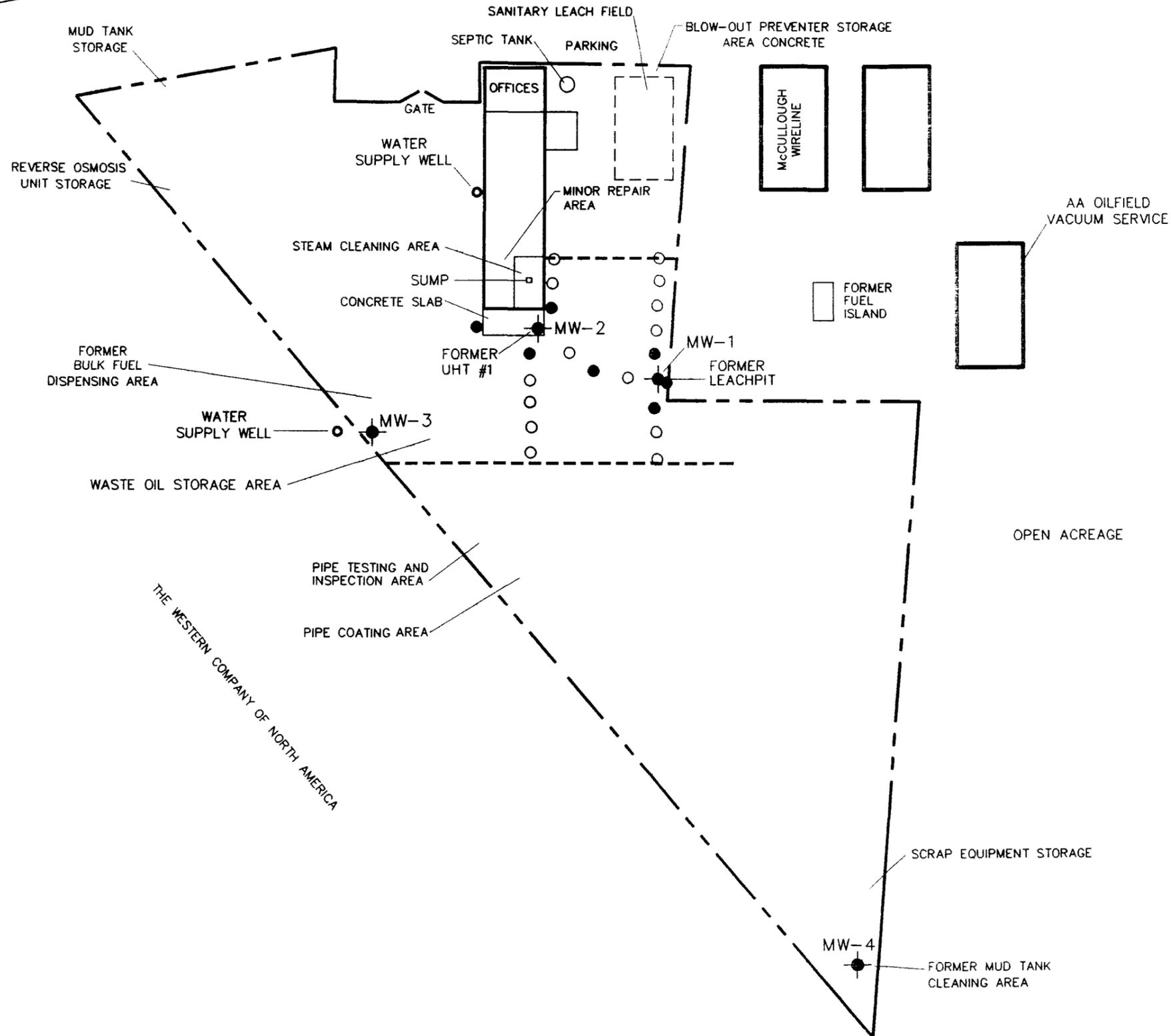
The borings for observation wells will be advanced to at least 13 feet below the water table. Borings not converted to observation wells will be advanced until field screening indicates "clean" conditions have been reached or to a depth of 20 feet, whichever is deepest. The first set of soil borings are depicted on Figure 3-1 as solid circles. If field screening (Section 3.2) suggests chemicals are present in soils or caliche in these borings, additional borings (depicted by open circles) may be located in the following fashion:

- Locate the second boring 20 feet from the first in the direction indicated on Figure 3-1.
- Repeat this process with additional borings until field screening does not indicate chemicals in soils to a depth of 20 feet or until the dashed line depicted on Figure 3-1 is reached.

Based on this technique, between seven and 21 borings may be drilled in addition to those for observation wells.

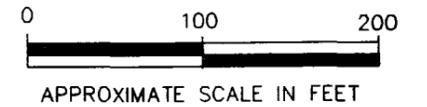
WEST COUNTY ROAD

WM. BILLY WALKER TRUCKING



**LEGEND:**

- MW-1 = BORING CONVERTED TO A OBSERVATION WELL
  - = SOIL BORINGS
  - = POTENTIAL LOCATION OF SUBSEQUENT SOIL BORING (20 FT. SPACING)
- UHT = UNDERGROUND HOLDING TANK



<b>ENSR™</b>		
ENSR CONSULTING AND ENGINEERING		
FIGURE 3-1		
LOCATION OF SOIL BORINGS		
HOMCO SITE NO. 135		
HOBBS, NEW MEXICO		
DRAWN BY: SJ/SJF	DATE: 3-21-91	PROJECT NUMBER:
CHK'D BY:	REVISED:	3519-006-135

CE351989

### **3.2 Sampling Methods**

The soil borings will be drilled with a truck mounted, hollow stem auger rig advancing split spoon, continuous tube or rock core samplers. Each sampler will be decontaminated before re-use by the following steps:

- acetone rinse;
- non-phosphate soap scrub;
- hexane rinse;
- deionized water rinse; and
- air dry.

All downhole equipment will be steam cleaned between borings.

The soil profiles will be continuously sampled. Samples will be logged in the fashion presented in Section 2.2. Within each boring, including those for wells, soil/caliche samples will be collected for chemical analyses (Section 3.3) at the following depths:

- immediately above the interface of the first soil and caliche interface;
- on 10 foot centers below the soil/caliche interface;
- at the bottom of the boring, if above the water table; and
- immediately below the water table, if advanced to that depth.

The 10 foot sampling intervals may be adjusted if layering of sands and caliche is encountered.

Samples for chemical analyses will be trimmed with a decontaminated trowel (if possible) to obtain a sample from within the core. The trimmed samples will be immediately placed in jars and placed in an ice filled, insulated cooler.

The cuttings from each borehole will be placed in 55 gallon drums for offsite disposal. Each borehole, except those converted to observation wells, will be tremie grouted to the surface with neat cement. The boring locations will be staked and surveyed for elevation (precise to 0.1 feet) and location (precise to 0.1 feet) by a surveyor licensed in New Mexico. All activities will be conducted in accordance with the site Health and Safety Plan (October, 1990).

### **3.3 Analytical Parameters and Quality Assurance/Quality Control**

Sampled soils will be analyzed for the parameters of Table 3-1.

For every 10 soil samples submitted for analyses, one sample will be submitted for duplicate BTEX, TPH and TOC analyses. Each cooler of samples shipped to the laboratory will be accompanied by a trip blank. The trip blank will consist of deionized water which will accompany the sample jars to the field and the filled jars to the laboratory. The trip blank will be analyzed for BTEX and TPH.

The validities of analytical data will be determined prior to interpretation following procedures of the Site Quality Assurance/Quality Control Plan (January, 1991).

### 3.4 Data Interpretation

Soil boring and analytical data will be used for the following:

- to construct geologic cross-sections of the site;
- to construct structural contours of the soil/caliche interface; and
- to construct plan view and cross-sectional view isocons for detected chemicals.

These figures, along with the groundwater data, will determine if the former leach pit, and the former UHT #1 were sources of chemicals in groundwater. These figures will also aid in scoping potential future activities, if any.

**Table 3-1**

**PARAMETERS AND METHODS FOR ANALYSES OF SOIL SAMPLES**

<u>Parameter</u>	<u>Preservative</u>	<u>Test Method</u>
TPH	4° C	EPA-600/4/79-020 418.1
BTEX	4° C	SW-846 8020
Volatile Organic Compounds <sup>(2)(3)</sup>	4° C	SW-846 8240
Semi-Volatile Organic Compounds <sup>(2)(3)</sup>	4° C	SW-846 8270
Soil TOC <sup>(1)</sup>	None	Agronomy No. 9, Part 2, 89-3.5
Soil Bulk Dry Density <sup>(1)</sup>	None	ASTM D4564-86

- (1) This analysis will only be performed on soil samples collected from immediately below the water table in observation well borings.
- (2) This analysis will be performed on one soil sample from each boring deemed "most contaminated" by field screening. If the boring is continued to the water table, a sample from immediately below the water table will also be submitted. BTEX and anlyses will not be performed on these samples.
- (3) The specific volatile and semi-volatile organic compounds analyzed are those found on the Target Compound List from the USEPA Contract Laboratory Program Statement of Work, 10/86, Rev. 7/87.

## 4.0 SCHEDULE

Figure 4-1 presents the schedule of activities for the soil and groundwater investigation.



## 5.0 REPORTING

A report summarizing activities, data and conclusions will be submitted to the ODC (see Figure 4-1 for schedule).

## 6.0 REFERENCES

Quality Assurance and Quality Control Plan, HOMCO Site 135, Hobbs, New Mexico, ENSR Consulting and Engineering, January, 1991

Health and Safety Plan (Appendix A), Phase I: Site Assessment, HOMCO Site 135, Hobbs, New Mexico, ENSR Consulting and Engineering, October, 1990.

Lyman, W. J., W. F. Reehl, and D. H. Rosenblatt, 1982, Handbook of Chemical Property Estimation Methods, McGraw-Hill Book Co., New York.

Todd, D.K., 1980 Groundwater Hydrology. John Wiley and Sons, New York. 534 pp.

**APPENDIX A**

February 25, 1991 Letter from ODC



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR

February 25, 1991

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

CERTIFIED MAIL  
RETURN RECEIPT NO. P-327-278-081

Ms. Darlene Venable  
ENSR Consulting and Engineering  
3000 Richmond Avenue  
Houston, Texas 77098

RE: Improvement Plans and Specifications  
HOMCO Facility No. 135  
Hobbs, New Mexico

Dear Ms. Venable:

The Oil Conservation Division (OCD) has received your requests dated February 14, 1991, and February 20, 1991 for authorization to dispose of stockpiled excavated soils from the former underground holding tank (UHT), leach pit, and bulk fuel terminal areas. Verbal approval for the disposal of these soils was granted on February 14, 1991 and February 20, 1991. Verbal approval for backfilling these areas was also granted with the following actions as a requirement:

1. An observation well will be drilled to the water table at the site of the UHT and leach pit to ascertain if contaminants have migrated into the ground water. These wells may be required to be converted to monitor or recovery wells if analysis of the ground water indicates contamination.
2. Determination of the lateral extent of contamination beyond the excavation limits of the UHT and leach pit area through a coring or other investigation program approved by OCD.
3. A core sample analysis south of the bulk fuel terminal as close to the property line as practical to determine the concentration of contaminants exiting/entering your property.

Further actions may be required pending review of the analytical results. These acquired actions could include ground water remediation, insitu soil remediation and/or concrete/asphalt pading of contaminated areas:

Ms. Darlene Venable  
February 25, 1991  
Page -2-

Please be advised this approval does not relieve HOMCO of liability should their operation result in actual pollution of surface or ground water or the environment actionable under other laws and/or regulations.

If you have any questions, please contact me at (505) 827-5884.

Sincerely,



Roger C. Anderson  
Environmental Engineer

cc: Hobbs District Office