

GW - 236

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

2002 → 1995

*@ Eunice*  
*3000*  
*down*

*1900-2600*  
*Hobbs Hwy*

**ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH**

I hereby acknowledge receipt of check No. [REDACTED] dated 2-1-02

or cash received on \_\_\_\_\_ in the amount of \$ 1,700.00

from Pate Trucking Co.

for Hobbs Service Facility GW-736

Submitted by: *[Signature]* Date: 2-7-02

Submitted to ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee \_\_\_\_\_ New Facility \_\_\_\_\_ Renewal

Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.

Full Payment  or Annual Increment \_\_\_\_\_

<b>PATE TRUCKING CO., INC.</b> P.O. BOX 2739 • 505-397-6264 HOBBS, NM 88241-2739	Bank of America Hobbs, New Mexico 88241 85-321/1122	N <sup>o</sup> <span style="background-color: black; color: black;">[REDACTED]</span>	
One Thousand Seven Hundred and 00/100 Dollars		DATE <b>Feb 1, 2002</b>	AMOUNT <b>***\$1,700.00</b>
PAY TO THE ORDER OF:	<b>NMED-WATER QUALITY MANAGEMENT          OIL CONSERVATION DIVISION          1220 SOUTH ST. FRANCIS DR.          SANTA FE, NM 87505          HICA</b>	PATE TRUCKING CO., INC. - PAYROLL <i>[Signature]</i> <b>Gary Mead</b> AUTHORIZED SIGNATURE	

NMED-WATER QUALITY MANAGEMENT

Nº 22424

Check Date: Feb 1, 2002

Check Amount: \$1,700.00

Discount Taken      Amount Paid

Item to be Paid - Description

DISCHARGE PLAN GW-236

1,700.00



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

**Lori Wrotenberg**  
Director  
Oil Conservation Division

January 10, 2002

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 3929 7358**

Mr. Gary Ehrlich  
Pate Trucking Co., Inc.  
P.O. Box 2739  
Hobbs, New Mexico 88241

**RE: Discharge Plan Fees GW-236**  
**Hobbs Service Facility**  
**Lea County, New Mexico**

Dear Mr. Ehrlich:

On July 8, 2001, Pate Trucking Co., Inc., received, via certified mail, an approval dated July 3, 2001 from the New Mexico Oil Conservation Division (OCD) for discharge plan GW-236. Each discharge plan has a filing fee and a flat fee as described in WQCC Section 3114. The OCD has not as of this date (January 10, 2002) received the flat fee. The last check submitted by Pate Trucking Co., Inc. was dated May 10, 2001 for the required filing fee. The total flat fee amount remaining is \$1,700.00 for discharge plan GW-236.

Pate Trucking Co., Inc. will submit the remaining \$1,700.00 flat fee in full by February 28, 2002 in order to be in compliance with Water Quality Control Commission Regulation 3114.B.6, or the OCD may initiate enforcement actions which may include fines and/or an order to cease all operations at the facility. Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office.

If you have any questions regarding this matter, please contact Mr. Jack Ford at (505) 476-3489.

Sincerely,

  
Roger Anderson  
Environmental Bureau Chief

RCA/wjf

xc: Hobbs OCD district office

U.S. Postal Service  
CERTIFIED MAIL-RECEIPT *100 100*  
(Domestic Mail Only; No Insurance Coverage Provided)

7001 1940 0004 3929 7358

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$



Sent To *G. Ehrlich*  
Street, Apt. No.; *Pate Trk.*  
or PO Box No.  
City, State, ZIP+ 4 *GW-236*

THE SANTA FE  
**NEW MEXICAN**

Founded 1849

NEW MEXICO OIL CONSERVATION DIVISION

ATTN: ED MARTIN  
2040 S. PACHECO  
SANTA FE, NM 87505

AD NUMBER: 207186      ACCOUNT: 56689  
LEGAL NO: 69249      P.O.#: 0119900033  
178 LINES      1 time(s) at \$ 78.47  
AFFIDAVITS:      5.25  
TAX:      5.23  
TOTAL:      88.95

NOTICE OF  
PUBLICATION

STATE OF NEW MEXICO  
ENERGY, MINERALS  
AND NATURAL RE-  
SOURCE DEPARTMENT  
OIL CONSERVATION  
DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-236) - Pate Trucking Co., Inc., Mr. Gary Ehrlich, P.O. Box 2739, Hobbs, New Mexico 88241, has submitted a discharge plan renewal application for their Hobbs Service Facility located in the NW/4 SW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico. Any planned discharged or incidental wastes at the facility will be stored in a closed top receptacle prior to transport to an OCD approved off-site disposal facility. Groundwater most likely to be affected by an accidental discharge is at a depth of 55 feet with a total dissolved solids of approximately 170 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of May, 2001.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

LORI WROTENBERY, Director  
Legal #69249  
Pub. May 21, 2001

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, MM Weideman being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #69249 a copy of which is hereto attached was published in said newspaper 1 day(s) between 05/21/2001 and 05/21/2001 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 21 day of May, 2001 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/s/

MM Weideman

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this  
21 day of May A.D. 2001

Notary

Laura E. Harding

Commission Expires

11/23/03

RECEIVED

MAY 25 2001

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated May 18 2001

and ending with the issue dated May 18 2001

Kathi Bearden  
Publisher

Sworn and subscribed to before

me this 18th day of

May 2001

Jodi Hendon  
Notary Public.

My Commission expires  
October 18, 2004  
(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

NOTICE OF PUBLICATION

May 18, 2001

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

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Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of May, 2001.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

SEAL  
LORI WROTENBERY, Director  
#18187

01100060000      01548386  
State of New Mexico Oil &  
1220 S. St. Francis  
Santa Fe, NM 87505

**Ford, Jack**

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**From:** Martin, Ed  
**Sent:** Tuesday, May 15, 2001 12:46 PM  
**To:** 'Hobbs News-Sun Attn: Brenda Tison'; 'Santa Fe New Mexican'  
**Cc:** Ford, Jack  
**Subject:** FW: Public Notice - GW-236

Please publish the attached legal notice one time only.

Upon publication please send to this office:

1. Publisher's affidavit
2. Invoice. Our purchase order number is:

Hobbs News-Sun

**01199008196**

Santa Fe New Mexican

**01199000033**

Please publish no later than Monday, May 21, 2001.

If you have any questions, please e-mail me or call (505) 476-3492.

Thank you.

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

**From:** Ford, Jack  
**Sent:** Tuesday, May 15, 2001 8:14 AM  
**To:** Martin, Ed  
**Subject:** Public Notice - GW-236



**NOTICE OF PUBLICATION**

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

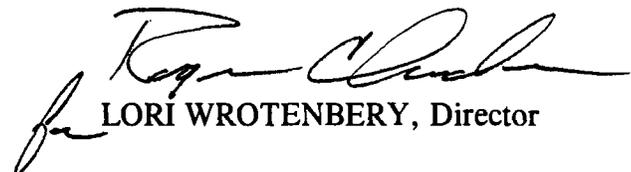
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If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 15th day of May, 2001.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
LORI WROTENBERY, Director

SEAL

**Pate Trucking Co., Inc.**  
New Mexico Operations

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P. O. Box 2739  
3800 S. Eunice Highway

505-397-6264  
800-657-9353  
Fax 505-397-2597

Hobbs, New Mexico 88241

May 11, 2001

New Mexico Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

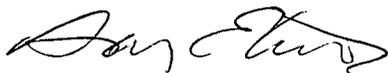
Attn: Mr. Jack Ford

RE: GW-236 Discharge Plan Renewal Request/Application

Dear Mr. Ford,

Pate Trucking Co., Inc./ NM Operations would like to take this time to thank you for your help and guidance in regards to the Discharge Plan Renewal Request/Application for our facility. We have filled all information in accordingly, per your conversation with Mr. Allen Hodge, Western Environmental Consultants. The check for the \$100.00 filing fee required by the State of New Mexico is enclosed and we have sent a copy to the District I Office, located 1625 N. French Dr., Hobbs, NM 88240. If there is any question or you need additional information please contact us at 505-397-6264 or 800-657-9353.

Sincerely,



Gary Ehrlich  
General Manager  
Pate Trucking Co., Inc./ NM Operations

Cc: District I Office, Hobbs, NM  
enclosure

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Revised January 24, 2001

Submit Original  
Plus 1 Copy  
to Santa Fe  
1 Copy to Appropriate  
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,  
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES  
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New  Renewal  Modification

1. Type: GW-236
2. Operator: Pate Trucking Co., Inc.  
Address: 3800 S. Euvic Hwy / P.O. Box 2739 Hobbs, NM 88241  
Contact Person: GARY MEAD Phone: 505-397-6264
3. Location: NW /4 SW /4 Section 14 Township 19S Range 38E  
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site. 877-729-9912
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.  
No Change
6. Attach a description of all materials stored or used at the facility.  
No Change
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.  
No Change
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.  
No Change
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.  
No Change
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.  
No Change
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.  
No Change
13. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.  
No Change
14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: GARY EARLICH

Title: MGR

Signature: [Signature]

Date: 05-05-01

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Revised January 24, 2001

Submit Original  
Plus 1 Copy  
to Santa Fe  
1 Copy to Appropriate  
District Office

**DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES, GAS PLANTS,  
REFINERIES, COMPRESSOR, GEOTHERMAL FACILITIES  
AND CRUDE OIL PUMP STATIONS**

(Refer to the OCD Guidelines for assistance in completing the application)

New       Renewal       Modification

1. Type: GW-236
2. Operator: Pate Trucking Co., Inc.  
Address: 3800 S. Eunice Hwy / PO Box 2739 Hobbs, NM 88241  
Contact Person: GARY MEAD Phone: 505-397-6264
3. Location: NW /4 SW /4 Section 14 Township 19S Range 38E  
Submit large scale topographic map showing exact location.
4. Attach the name, telephone number and address of the landowner of the facility site.  
No Change
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.  
No Change
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No Change
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No Change
14. CERTIFICATION I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Gary Ehrlich Title: mgr

Signature: [Signature] Date: 05-05-01

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 5/10/01  
or cash received on \_\_\_\_\_ in the amount of \$ 100.00  
from Pate Trucking Co.  
for Hobbs Service Facility  
Submitted by: [Signature] (Family Name) GW-236 Date: 5/15/01 (DP No.)  
Submitted to ASD by: \_\_\_\_\_ Date: \_\_\_\_\_  
Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_  
Filing Fee  New Facility \_\_\_\_\_ Renewal   
Modification \_\_\_\_\_ Other \_\_\_\_\_ (Specify)  
Organization Code 521.07 Applicable FY 2001

To be deposited in the Water Quality Management Fund.  
Full Payment  or Annual Increment \_\_\_\_\_

PATE TRUCKING CO., INC.  
P.O. BOX 2739 505-397-6264  
HOBBS, NM 88241-2739

Bank of America  
Hobbs, New Mexico 88241  
95-321/1122

Check Number: [redacted]

May 10, 2001 \*\*\*\*\*\$100.00\*

DATE AMOUNT

One Hundred and 0/100 Dollars

NMED-WATER QUALITY MANAGEMENT  
OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
SANTA FE, NM 87505  
USA

PATE TRUCKING CO., INC. - ACCOUNTS PAYABLE

[Signature]  
[Signature]  
AUTHORIZED SIGNATURE

PAY  
TO THE  
ORDER  
OF:

NMED-WATER QUALITY MANAGEMENT

Check Number: 17628

Check Date: May 10, 2001

Check Amount: \$100.00

Item to be Paid - Description

Discount Taken      Amount Paid

GW-236 DISCHARGE PLAN RENEWAL

100.00

FILING FEE



TRANSMITTAL COVER SHEET

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

PLEASE DELIVER THIS FAX:

TO: Gary Ehrlich - Pate Trucking Co.

FROM: W. J. Ford - NMOC

DATE: May 8, 2001

PAGES: 3

SUBJECT: Discharge Plan GW-236

Expiry

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

# IMPORTANT MESSAGE

TO \_\_\_\_\_  
DATE \_\_\_\_\_ TIME \_\_\_\_\_ A.M.  
P.M.  
M \_\_\_\_\_  
OF \_\_\_\_\_  
PHONE \_\_\_\_\_  
Area Code Number Extension  
FAX \_\_\_\_\_

TELEPHONED	PLEASE CALL	
CAME TO SEE YOU	RETURNED YOUR CALL	
WANTS TO SEE YOU	WILL CALL AGAIN	
WILL FAX YOU	URGENT!	

Message  
505-397-2597  
Gary Ehrlich →  
Signed \_\_\_\_\_

5/15/01



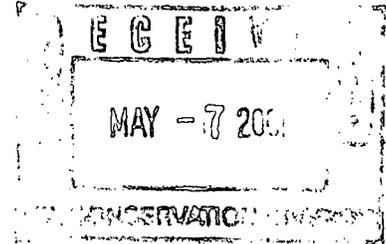
# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

April 30, 2001

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## REMINDER



Mr. Gary Mead  
Pate Trucking Co., Inc.  
P.O. Box 1008  
Hobbs, New Mexico 88241

2139

**RE: Discharge Plan Renewal Notice for the Pate Trucking Co., Inc. Facility**

Dear Mr. Mead:

Pate Trucking Co., Inc. has the following discharge plan, which expires during the current calendar year.

**GW-236 expires 5/23/2001 – Hobbs Facility**

**WQCC 3106.F.** If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued

under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

The discharge plan renewal application for each of the above facilities is subject to WQCC Regulation 20NMAC 6.2.3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$100.00. After January 15, 2001 renewal discharge plans require a flat fee equal to the flat fee schedule for oil field service facilities pursuant to revised WQCC Regulations 20NMAC 6.2.3114. A copy of the revised fee schedule is included for your assistance. The \$100.00 filing fee is to be submitted with each discharge plan renewal application and is nonrefundable.

Mr. Gary Mead  
February 9, 2001  
Page 2

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office. Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. **Note that the completed and signed application form must be submitted with your discharge plan renewal request.** A complete copy of the regulations is also available on NMED's website at [www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)).

If any of the above-sited facilities no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If the Pate Trucking Co., Inc. has any questions, please do not hesitate to contact Mr. Jack Ford at (505) 476-3489.

Sincerely,



W. Jack Ford, C.P.G.  
Oil Conservation Division

cc: OCD Hobbs District Office

State of New Mexico

**ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT**

1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505



RETURNED TO SENDER  
**NO SUCH ADDRESS**

Mr. G. [unclear]  
Pate Trucking, Inc.  
P.O. Box 1008  
Hobbs, New Mexico 88241

O C D  
ENV



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

April 30, 2001

**Lori Wrotenbery**  
Director  
Oil Conservation Division

## REMINDER

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Pate Trucking Co., Inc.  
P.O. Box 1008  
Hobbs, New Mexico 88241

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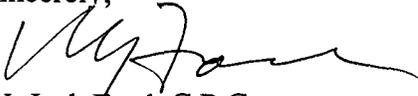
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February 9, 2001  
Page 2

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office. Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. **Note that the completed and signed application form must be submitted with your discharge plan renewal request.** A complete copy of the regulations is also available on NMED's website at [www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)).

If any of the above-sited facilities no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If the Pate Trucking Co., Inc. has any questions, please do not hesitate to contact Mr. Jack Ford at (505) 476-3489.

Sincerely,



W. Jack Ford, C.P.G.  
Oil Conservation Division

cc: OCD Hobbs District Office



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Jennifer A. Salisbury**  
Cabinet Secretary

February 9, 2001

**Lori Wrotenbery**  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 5051 0111**

Mr. Gary Mead  
Pate Trucking Co., Inc.  
P.O. Box 1008  
Hobbs, New Mexico 88241

**RE: Discharge Plan Renewal Notice for the Pate Trucking Co., Inc. Facility**

Dear Mr. Mead:

Pate Trucking Co., Inc. has the following discharge plan, which expires during the current calendar year.

**GW-236 expires 5/23/2001 – Hobbs Facility**

**WQCC 3106.F.** If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued

under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

The discharge plan renewal application for each of the above facilities is subject to WQCC Regulation 20NMAC 6.2.3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$100.00. After January 15, 2001 renewal discharge plans require a flat fee equal to the flat fee schedule for oil field service facilities pursuant to revised WQCC Regulations 20NMAC 6.2.3114. A copy of the revised fee schedule is included for your assistance. The \$100.00 filing fee is to be submitted with each discharge plan renewal application and is nonrefundable.

Please make all checks payable to: **NMED-Water Quality Management** and addressed to the OCD Santa Fe Office. Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. **Note that the completed and signed application form must be submitted with your discharge plan renewal request.** A complete copy of the regulations is also available on NMED's website at [www.nmenv.state.nm.us](http://www.nmenv.state.nm.us).

If any of the above-sited facilities no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If the Pate Trucking Co., Inc. has any questions, please do not hesitate to contact Mr. Jack Ford at (505) 476-3489.

Sincerely,



Roger C. Anderson  
Oil Conservation Division

cc: OCD Hobbs District Office

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark: SANTA FE NM 20502

Name (Please Print Clearly) (To be completed by mailer): *G. Mead*

Street, Apt. No., or PO Box No.: *Pate Trkg.*

City, State, ZIP+ 4: *505-236*

PS Form 3800, July 1999 See Reverse for Instructions

7099 3220 0000 5051 0111



**NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

April 14, 1998

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z-357-869-944**

Mr. Gary Mead  
President  
Pate Trucking Co., Inc.  
P.O. Box 1008  
Hobbs, NM 88241

**RE: Final Report for Leach Field Closure  
( 2 Class V Wells)  
Hobbs Facility - GW-236  
Lea County, New Mexico**

Dear Mr. Mead:

The OCD has reviewed the above referenced Final Report submitted by your consultant, Western Environmental Consultants, received March 19, 1998. The Final Report covered the results of completion of a work plan submitted and approved by OCD for closure of two (2) class V leach field systems that were inactive at the facility located in the NW/4 NW/4 SW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico.

Based upon the information provided in the Final Report OCD hereby approves the closure of the two (2) Class V wells. Please be advised that the approval of this closure does not relieve Pate Trucking Co. of liability for the protection of the vadose zone and groundwater associated with this facility.

If you have any questions regarding this matter feel free to give me a call at (505)-827-7156.

Sincerely,

W. Jack Ford, C.P.G.  
Geologist  
Environmental Bureau - OCD

cc: Mr. Allen Hodge, REM, Western Environmental Consultants  
Mr. Wayne Price, Environmental Engineer - OCD Hobbs District I

Z 357 869 944

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to	<i>Gary Mead</i>
Street & Number	<i>Vale Tky.</i>
Post Office, State, & ZIP Code	<i>Hobbs</i>
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	<i>GW-236</i>

PS Form 3800 April 1995

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 7/7/97,  
or cash received on \_\_\_\_\_ in the amount of \$ 1104.00  
from Pate Trucking  
for Hobbs GW-236

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
Submitted to ASD by: R. Chudler Date: 7/31/97  
Received in ASD by: \_\_\_\_\_ Date: \_\_\_\_\_

Filing Fee \_\_\_\_\_ New Facility \_\_\_\_\_ Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_

Organization Code 521.07 Applicable FY 98

To be deposited in the Water Quality Management Fund.

Full Payment  or Annual Increment   
2 to 5 of 5

PATE TRUCKING CO., INC.  
P.O. BOX 1008 505-397-6264  
HOBBS, NM 88241

SUNWEST BANK  
Hobbs, NM 88241  
95-321/1122



Jul 7, 1997 \*\*\*\*\*\$1,104.00\*

DATE AMOUNT

One Thousand One Hundred Four and 0/100 Dollars

NMED WATER QUALITY MGT FUND  
C/O NM OIL CONSERVATION DIV  
2040 SOUTH PACHECO  
SANTA FE, NM 87505  
USA

PATE TRUCKING CO., INC. - ACCOUNTS PAYABLE

Gary Mead  
Mark Mead  
AUTHORIZED SIGNATURE

BY THE ORDER



NMED WATER QUALITY MGT FUND

Check Number: 4751

Check Date: Jul 7, 1997

Check Amount: \$1,104.00

Item to be Paid - Description

Discount Taken      Amount Paid

---

FEE DISCHARGE PLAN GW-236

1,104.00

*GW-236*

NMED WATER QUALITY MGT FUND

Check Number: 4751  
Check Date: Jul 7, 1997

Check Amount: \$1,104.00  
Discount Taken      Amount Paid

Item to be Paid - Description

FEE DISCHARGE PLAN GM-236

1,104.00

PATE TRUCKING CO., INC.

PATE TRUCKING CO., INC.

P.O. BOX 1008 505-397-6264  
HOBBS, NM 88241

SUNWEST BANK

Hobbs, NM 88241  
95-321/1122



Jul 7, 1997

\*\*\*\*\*\$1,104.00\*

DATE

AMOUNT

One Thousand One Hundred Four and 0/100 Dollars

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NMED WATER QUALITY MGT FUND  
C/O NM OIL CONSERVATION DIV  
2040 SOUTH PACHECO  
SANTA FE, NM 87505  
USA

PATE TRUCKING CO., INC. - ACCOUNTS PAYABLE

*Gary Mead*  
*Mead Mead*

AUTHORIZED SIGNATURE



RECEIVED

JUL 24 1997

Environmental Bureau  
Oil Conservation Division



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

June 30, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-326-936-629**

Mr. David Cummings  
General Manager  
Pate Trucking Co., Inc. (PTC)  
P.O. Box 1008  
Hobbs, NM 88241

**RE: Discharge Plan Fees GW-236  
Hobbs Facility  
Lea County, New Mexico**

Dear Mr. Cummings:

On June 4, 1996, PTC, Inc. received, via certified mail, an approval dated May 23, 1996 from the New Mexico Oil Conservation Division (OCD) for discharge plan GW-236. Each discharge plan has a filing fee and a flat fee as described in WQCC Section 3114 (see attachment). The OCD has not as of this date (June 30, 1997) received the annual incremental amount of \$276. The last check submitted by PTC, Inc. was dated June 14, 1996. The total flat fee amount remaining is \$1,104 of the original \$1,380 flat fee for discharge plan GW-236.

**PTC, Inc. will submit the remaining \$1,104 flat fee in full by July 30, 1997 in order to be in compliance with Water Quality Control Commission Regulation 3114.B.6, or the OCD may initiate enforcement actions which may include fines and/or an order to cease all operations at the facility. Please make all checks payable to: NMED-Water Quality Management and addressed to the OCD Santa Fe Office.**

If you have any questions regarding this matter, please contact me at (505)-827-7152 or Mr. Patricio Sanchez at (505) 827-7156.

Sincerely,

Roger Anderson  
Environmental Bureau Chief

RCA/pws

c: Hobbs OCD District Office  
**attachment**

P 326 936 629

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to PATE Trucking - Mr. Cummings	
Street & Number on-236- BP Flatfic	
Post Office, State & ZIP Code late.	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

3114. FEES.

A. DEFINITIONS. - As used in this Section:

1. "average discharge" means the average daily flow rate of effluent discharge as measured or estimated over the period of one year; [8-17-91]

2. "billable facility" means any facility or portion of a facility required to have a discharge plan; and [8-17-91]

3. "discharge plan modification" means a change in requirements of a discharge plan as requested by the discharger as a result of past, present or anticipated changes in the quality or quantity of effluent or the location of the discharge; or as required by the secretary. [8-17-91]

B. FEE AMOUNT AND SCHEDULE OF PAYMENT - Every billable facility submitting a discharge plan for approval, modification or renewal shall pay the fees specified in this Section to the Water Quality Management Fund. [8-17-91]

1. The amount of the fee payment for a new discharge plan shall be calculated using the following formula:

1995 OCT 27 PM 1:26

TOTAL FEE = FILING FEE + FLAT FEE or DISCHARGE FEE

a. The filing fee is fifty (50) dollars for each new discharge plan application.

b. Billable facilities in the following categories applying for a new discharge plan will pay a flat fee as indicated:

## FLAT FEE

Facility Category	Flat Fee
Fuel Terminals	\$ 2300
Gas Compressor Stations	
0 to 1000 Horsepower	0
1001 to 3000 Horsepower	690
Greater than 3000 Horsepower	1380
Gas Processing Plants	3335
Injection Wells: Classes I & III and Geothermal	1380
In Situ Leach - except salt	3335
Leach Heaps - copper	3335
Leach Heaps - precious metals	3510
Mine Dewatering	1065
Oil & Gas Service Companies	1380
Refineries	7820
Remediations - discharge plan only	1380
Tailings - copper, uranium & molybdenum	4860
Uranium - ion exchange & evaporation pond	1210

c. All billable facilities applying for a new discharge plan but which are not subject to a flat fee will pay the following fees according to their rate of effluent discharge:

## DISCHARGE FEE

Average Discharge Gallons per Day	Fee
0 to 9,999	\$ 575
10,000 to 49,999	1150
50,000 to 99,999	1725
100,000 to 499,999	2300
500,000 to 999,999	2875
1,000,000 to 4,999,999	3450
5,000,000 to 9,999,999	4025
10,000,000 and greater	4600

[8-17-91]

2. Billable facilities applying for discharge plans

20 NMAC 6.2

1995 OCT 27 PM 1:26

which are subsequently withdrawn or denied shall pay one-half of the flat fee or discharge fee at the time of denial or withdrawal.  
[8-17-91]

3. Every billable facility submitting a discharge plan modification or renewal will be assessed a fee equal to the filing fee plus one-half of the flat fee or the discharge fee, whichever is applicable. Applications for both renewal and a modification will pay a fee equal to that assessed a new discharge plan application. [8-17-91]

4. If the secretary requires a discharge plan modification as a component of an enforcement action, the facility shall pay the applicable discharge plan modification fee. If the secretary requires a discharge plan modification outside the context of an enforcement action, the facility shall not be assessed a fee.  
[8-17-91, 12-1-95]

5. The secretary may waive flat fees or discharge fees for discharge plan modifications which require little or no cost for investigation or issuance. [8-17-91, 12-1-95]

6. Billable facilities shall pay the filing fee at the time of discharge plan application. The filing fee is nonrefundable. The required flat fees or discharge fees may be paid in a single payment or in equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of discharge plan approval. The discharge plan or discharge plan application review of any facility shall be suspended or terminated if the facility fails to submit an installment payment by its due date. [8-17-91]

[3115-4100] Reserved



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

February 17, 1997

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-768**

Mr. David Cummings  
General Manager  
Pate Trucking Co., Inc.  
P.O. Box 1008  
Hobbs, NM 88241

**RE: Work Plan for Leach Field Closure  
( 2 Class V Wells)  
Hobbs Facility - GW-236  
Lea County, New Mexico**

Dear Mr. Cummings:

The OCD has reviewed the above mentioned work plan submitted by Pate Trucking Co., Inc. on January 30, 1997. The work plan is for two (2) class V leach field systems that are currently inactive at the facility located in the NW/4 NW/4 SW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico. The work plan is hereby approved with the following conditions:

1. The OCD Hobbs District Office at (505)-393-6161, Mr. Wayne Price will be notified at least 72 hours before any of the actual closure activity begins at the facility.
2. If any of the wastes generated during the excavation/delineation are Hazardous in terms of RCRA Subtitle C Regulations as defined in 40 CFR Part 261, Pate Trucking Co., Inc. will notify the New Mexico Environment Department, Hazardous and Radioactive Materials Bureau at (505)-827-1558 for guidance in dealing with hazardous waste.
3. Upon completion of the excavation/delineation of the two leach fields, Pate Trucking Co., Inc. will fill the excavation with clean soil and mound the soil in such a manner as to prevent ponding of precipitation on the affected area.
4. Pate Trucking Co., Inc. upon completion of the approved work plan and conditions of approval will submit a "Final Closure Report" for the two (2) leach systems to the OCD Santa Fe Division Office for approval, with a copy to the OCD Hobbs District Office, within sixty (60) days of completion.

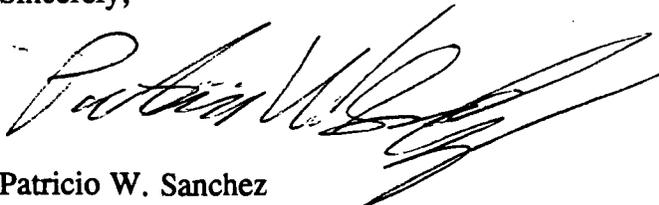
**Note:** The "Final Closure Report" will verify that all of work plan elements and the conditions of approval of this letter have been met. Also, the copy of the report that is sent to Santa Fe will include original copies of the lab analytical work along with proper lab QA/QC.

Mr. David Cummings  
Pate Trucking Co., Inc.  
Class V Work Plan Approval  
February 17, 1997  
Page 2

Please be advised that the approval of this plan does not relieve **Pate Trucking Co.** of liability should the work plan fail to fully delineate/remediate the vadose zone and groundwater associated with this facility.

If you have any questions regarding this matter feel free to give me a call at (505)-827-7156.

Sincerely,



Patricio W. Sanchez  
Petroleum Engineering Specialist  
Environmental Bureau - OCD

c: Mr. Wayne Price Environmental Engineer - OCD Hobbs District I  
Mr. Allen Hodge, REM  
Western Environmental Consultants  
P.O. Box 1816  
Hobbs, NM 88241

P 288 258 768

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to <i>Perle Trucking - Mr. Cummings</i>	
Street & Number <i>Class V - Work Plus Agency</i>	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees <sup>3</sup>	\$
Postmark or Date	

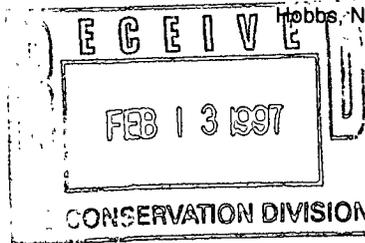
PS Form 3800, April 1995

**Pate Trucking Co., Inc.**  
**New Mexico Operations**

P. O. Box 1008  
3800 S. Eunice Highway

505-397-6264  
800-657-9353  
Fax 505-397-2597

Hobbs, New Mexico 88241



**JANUARY 30, 1997**

**TO: NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPT  
OIL CONSERVATION DIVISION3  
2040 SOUTH PACHECO STREET  
SANTA FE, NM 87505**

**ATTN: PAT SANCHEZ**

**FROM: PATE TRUCKING CO., INC.  
P.O. BOX 1008  
3800 SOUTH EUNICE HWY.  
HOBBS, NM 88240**

**RECEIVED**

**FEB 13 1996**

Environmental Bureau  
Oil Conservation Division

**DEAR MR. SANCHEZ,**

**PLEASE FIND ENCLOSED A COPY OF OUR WORK PLAN THAT YOU HAVE REQUESTED SO THAT WE MAY CLOSE THE TWO (2) EPA CLASS V LEACH FIELDS LOCATED AT PATE TRUCKING CO., INC., 3800 SOUTH EUNICE HWY, HOBBS, NM 88240. THE ENCLOSED WORK PLAN WAS PREPARED BY WESTERN ENVIRONMENTAL CONSULTANTS FOR ME, DAVID CUMMINGS, GENERAL MANAGER, PATE TRUCKING CO., INC. THANK YOU FOR YOUR ASSISTANCE IN THIS MATTER.**

**SINCERELY,**

A handwritten signature in cursive script that reads "David Cummings".

**DAVID CUMMINGS  
GENERAL MANAGER  
PATE TRUCKING CO., INC.**



P.O. Box 1816  
Hobbs, New Mexico 88241

Phone (505) 392-5021  
Fax (505) 397-2597

January 8, 1997

RECEIVED

FEB 13 1996

Mr. David Cummings  
District Manager

Environmenta. Bureau  
Oil Conservation Division

Pate Trucking Company  
3800 South Eunice Hwy.  
PO Box 1008  
Hobbs, New Mexico 88241

RE: Work Plan for Leach Field Closure  
Pate Trucking Facility  
3800 S. Eunice Hwy.  
Hobbs, New Mexico

Mr. Cummings:

Western Environmental Consultants (WEC) is pleased to present this work plan to close the two inactive leach fields (Class V injection wells) at the above listed site. The work plan was developed to close the leach fields in accordance with New Mexico Oil Conservation Division (NMOCD) Unlined Surface Impoundment Closure Guides as specified in the NMOCD's Discharge Plan Requirement Inspection letter, dated September 20, 1995. It is our understanding that any potential contamination of the leach field was the result of activities associated with the operation of an oil field service company that previously occupied the site. The two leach fields were abandoned prior to and have not been used since Pate Trucking Company took over the facility in September 1995.

The potential contaminates of concern are expected to be low level concentrations of petroleum hydrocarbons and possibly metals that may have been discharged into the leach fields and absorbed by the surrounding soils.

The NMOCD regulates disposal of non-domestic wastes resulting from the oil field service industry. In addition, the NMOCD administers all Water Quality Act regulations pertaining to surface and ground water except sewage for the oil field service industry. This authority includes the disposition of non-domestic, non-hazardous wastes at oil field facilities.

#### **Scope of Work**

- 1 Excavate the leach fields and any near surface soils containing any observed potential contamination. Since the leach field lines (potential contaminate source) were buried approximately two (2) feet below ground surface and any effluent discharged would have migrated downward the potential impacted area is expected to be limited to the near surface soils. Initial excavation operations will consist of removing the field lines and soils to a depth of approximately three (3) feet (one foot below the bottom of the field lines) to minimize the volume of waste generated (estimated waste volume is approximately 24 cubic yards). The excavated soils will be stockpiled at an on-site location pending waste characterization and disposal. The soils will be staged on and covered with plastic to prevent the potential spread of contamination.

- 2 Collect four (4) soil samples of the excavated area for Total Petroleum Hydrocarbons (TPH) analysis to verify that the remaining surface soils at the site are below NMOCD clean up guidelines for TPH levels for spills/releases. Should the TPH concentrations in the remaining soils exceed NMOCD levels, an additional 6-inch layer of soil will be removed and stockpiled.
- 3 Collect a composite sample of the excavated material for laboratory analysis. The purpose of the composite sample is to characterize the excavated material for waste classification in accordance with RCRA Subtitle C regulations. The sample will be analyzed for TPH, volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), eight RCRA metals, and solid waste characteristics (ignitability, corrosivity, reactivity, and toxicity).
- 4 Should the analytical results from the sample of excavated material record levels of individual compounds that exceed EPA maximum concentration levels (MCL) for toxicity characteristics, a sampling plan to verify the soils remaining in the excavated area are below MCL levels will be developed. This plan will include the collection of a minimum of two (2) soil samples from randomly selected locations within the excavated area. In order to minimize costs, the samples will be analyzed for only compounds that exceeded MCL levels.
- 5 Should the analytical results record individual compound concentrations below EPA listed MCL, the tested materials will be considered a non-hazardous waste generated at an oil field facility. The materials will be transported to a NMOCD permitted commercial waste disposal facility. Each load of material will be accompanied by a manifest in accordance with Section 711 of the New Mexico Solid Waste Management Regulations.

### Estimated Cost

#### Item Description

1	Excavate and stage material using a backhoe (24 cubic yards)	Backhoe @ 39.90/hr Est. 20/hr	798.00
2	Labor to assist excavation and staging.	Environmental Field Technician @ 32.50/hr Est. 20/hr	650.00
3	Sample excavated area for TPH (12 Samples). Sample excavated material for TPH (4 Samples).	45.00 per sample Est. 16 total	720.00
4	Sample excavated material for TCLP VOC, SVOC, metals, and characteristics (includes sampling, chain-of-custody, and laboratory analysis of 2 soil samples).	1150.00 per sample two samples	2300.00
5	Plastic to stage excavated material on.	90.00 per roll two rolls	180.00
6	Transport 24 cubic yards to the Parabo Disposal Facility (6 yard dump truck and backhoe.	39.90/hr 2/hr.per load Est. 4 loads	319.20

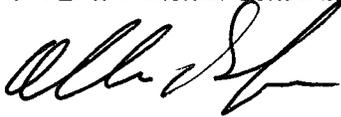
7 Disposal fees.	14.00/cyd cyds	Est. 24	336.00
<b>Estimated cost</b>			<b>5303.20</b>
<b>New Mexico Gross Receipt Tax</b>			<u>318.19</u>
<b>Total Estimated Cost</b>			<b>5621.39</b>

The above costs assume the waste is non-hazardous and the total volume of material is 24 cubic yards. Any services performed outside the scope of work will be billed at the above listed rates. We estimate the scope of work will take approximately 3 weeks to complete (24 hours on site work, approximately 15 days to receive analytical results, 4 days to obtain approval from NMOCD, and 1 day to dispose of excavated material).

Should excavation operations identify any additional concerns outside the scope of work, an approval from a representative of Pate Trucking Company will be obtained prior to performing any additional services

Western Environmental Consultants appreciates this opportunity to provide you with our professional services. Please feel free to call us at any time for further information or questions you may have with regards to our work plan.

Respectfully,  
Western Environmental Consultants



Allen Hodge REM  
VP Operations

cc: Mr. Patricio W. Sanchez - OCD Environmental Bureau  
Mr. Wayne Price - OCD Hobbs District 1



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

November 22, 1996

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. P-288-258-704**

Mr. Gary Reid  
Pate Trucking Co.  
P.O. BOX 639  
Hobbs, NM 88241

**RE: Discharge Plan GW-236  
NOD - Class V Investigation  
Hobbs Facility  
Lea County, New Mexico**

Dear Mr. Reid:

The discharge plan GW-236 for the Pate Trucking Co. Hobbs facility located in the NW/4 NW/4 SW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico, was approved on May 23, 1996 under the conditions contained in the enclosed attachment. The OCD has yet to receive the work plan as described as committed to by Pate Trucking Co. in the permit update from Pate Trucking Co. dated May 21, 1996. The update was part of permit condition number 2 of the approval letter dated May 23, 1996. **Please submit a work plan by January 10, 1997 to the OCD Santa Fe Division Office in duplicate, with a copy to the attention of Mr. Wayne Price at the OCD Hobbs District Office.**

The discharge plan application was submitted pursuant to Section 3106 of the New Mexico Water Quality Control Commission Regulations. Please note Sections 3109.E and 3109.F which provide for possible future amendments or modifications of the plan. Please be advised that the approval of this plan did not relieve **Pate Trucking Co.** of liability should the operations associated with this facility result in pollution of surface water, ground water, or the environment.

Sincerely,

Patricio W. Sanchez  
Petroleum Engineering Specialist  
Environmental Bureau - OCD  
(505)-827-7156

**Attachment - Permit Conditions dated May 23, 1996.**

xc: Mr. Wayne Price - OCD Hobbs District I

P 288 258 704

US Postal Service  
Receipt for Certified Mail  
No Insurance Coverage Provided.  
Do not use for International Mail (See reverse)

Sent to PATE - Mr. Reid	
Street & Number GW-236	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Mr. Gary Reid  
GW-236 Approval  
Pate Trucking Co.  
Page 3  
May 23, 1996

**ATTACHMENT TO DISCHARGE PLAN GW-236**  
**Pate Trucking Co. - Hobbs Facility**  
**DISCHARGE PLAN REQUIREMENTS**  
(May 23, 1996)

1. **Payment of Discharge Plan Fees:** The \$1,380 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. **Pate Trucking Co. Commitments:** Pate Trucking Co. will abide by all commitments submitted in the Application dated February 7, 1996 and the permit update dated on May 21, 1996 from Pate Trucking Co. and this approval letter with conditions of approval from OCD dated May 23, 1996.
3. **Drum Storage:** All drums containing materials other than fresh water must be stored on an impermeable pad and curb type containment. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.
4. **Process Areas:** All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
5. **Above Ground Tanks:** All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad.
6. **Above Ground Saddle Tanks:** Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
7. **Tank Labeling:** All tanks should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

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8. **Below Grade Tanks/Sumps**: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks that do not have secondary containment and leak detection must demonstrate integrity on an annual basis. Integrity tests include pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks /or sumps.

9. **Underground Process/Wastewater Lines**: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity at present and then every 5 years there after. Companies may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD.

10. **Housekeeping**: All systems designed for spill collection/prevention should be inspected to ensure proper operation and to prevent overtopping or system failure.

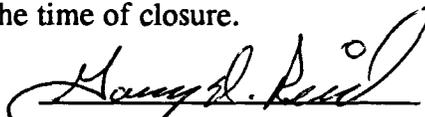
Any contaminated soils that are collected at the facility will be tested for hazardous constituents, and after receiving OCD approval, will be disposed of at an OCD approved site.

11. **Spill Reporting**: All spills/releases shall be reported pursuant to OCD Rule 116 and WQCC 1203 to the Hobbs OCD District Office at (505)-393-6161.

12. **Transfer of Discharge Plan**: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

13. **Closure**: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

14. **Conditions accepted by:**

  
Company Representative

  
Date

  
Title

ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 6/14/96  
or cash received on \_\_\_\_\_ in the amount of \$ 276.00  
from Pate Trucking  
for Hobbs (Facility Name) GW-236 (DP No.)  
Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_  
Submitted to ASD by: R. Chudman Date: 6/21/96  
Received in ASD by: Dyanne Seeger Date: 6-21-96  
Filing Fee \_\_\_\_\_ New Facility  Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_ (specify)  
Organization Code 521.07 Applicable FY 96

To be deposited in the Water Quality Management Fund.

Full Payment \_\_\_\_\_ or Annual Increment   
1 of 5

PATE TRUCKING CO., INC.  
P.O. BOX 1008 335-637-2211  
HOBBS, NM 88241

SUNWEST BANK  
Hobbs, NM 88241  
95-3211122

Jun 14, 1996 \*\*\*\*\*\$276.00  
DATE AMOUNT

Two Hundred Seventy-Six and 0/100 Dollars

PAID  
TO THE  
ORDER  
OF

NMED WATER QUALITY MGT FUND  
C/O NM OIL CONSERVATION DIV  
2040 SOUTH PACHECO  
SANTA FE, NM 87505  
USA

PATE TRUCKING CO., INC. - ACCOUNT PAYABLE

Henry D. Reed  
Mark Mead  
AUTHORIZED SIGNATURE



NMED WATER QUALITY FUND

Check Number: 1050  
Check Date: Jun 14, 1996

Check Amount: \$276.00

Item to be Paid - Description

Discount Taken      Amount Paid

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1ST ANNUAL INSTALLMENT ON DISCHARGE PLAN APPROVAL

276.00

# DISCHARGE PLAN

prepared for

## **Pate Trucking Company, Inc.**

for the facility located at  
3800 South Eunice Highway  
Hobbs, New Mexico 88240

RECEIVED

MAY 23 1996

Environmental Bureau  
Oil Conservation Division

Prepared by:

**F. Wesley Root**  
3624 West Casa Verde  
Hobbs, New Mexico 88241  
(505) 392-8844

May 21, 1996

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**I. Type of Operation**

Pate Trucking Company, Inc. is an Oil and Gas Service Company that provides transport services to clients in the oilfield. The facility is located on Highway 18 approximately 1.5 miles south of the corporate boundary of the city of Hobbs, New Mexico.

The major purpose of the facility is to provide an equipment yard, office, routine maintenance building, and chemical storage area for Pate Trucking Company, Inc. No non-domestic wastes are disposed of at the facility. The only domestic wastes discharged to the environment at the site is effluent from the office septic system.

The normal hours of operation are 7:00 AM to 5:00 PM Monday through Friday. The facility is fenced and secured during hours when company personnel are not present.

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

Operator: Pate Trucking Company, Inc.  
3800 South Eunice Highway  
Hobbs New Mexico 88240  
Telephone: 505-392-8844

Responsible Party: Same as above

Local Representatives: Mr. Gary Reid - General Manager  
Mr. Mark Mead - Vice President  
Mr. Mike Harvey - Sale Manager  
Mr. Allen Hodge - Safety Officer

**III. Location of Potential Discharge**

The facility is located in the Northwest Quarter of the Northwest Quarter of the Southwest Quarter of Section 14 , Township 19 South, Range 38 East, N.M.P.M., Lea County, New Mexico (Figure 1, Appendix A).

**IV. Landowners**

Currently, Pate Trucking Company, Inc. is leasing the facility. The landowner of record is:  
Mr. Darrell Compton  
1401 North Avenue D  
Denver City, Texas 79323  
Telephone: 806-592-7006

**V. Facility Description**

The facility is situated on approximately seven acres of land. A diagram of the facility including facility/property boundaries, fences, pits, berms, tanks, locations of discharges, storage facilities, disposal facilities, processing facilities, and other relevant areas is shown in Figure 2, Appendix A. The facility consists of the following:

- An office building
- A maintenance/shop building
- One abandoned non-registered water well
- One active non-registered water well
- An abandoned concrete wash pad with sump
- Two abandoned leech fields (Class V injection wells)
- An active underground septic system
- An above ground diesel storage tank
- An above ground used oil storage tank
- An above ground liquid petroleum gas (LPG) storage tank
- An above ground KCL storage tank
- An unlined fish pond
- A drum storage area with an impermeable surface
- An equipment storage yard

All storage tanks at the facility are above ground (ASTs) and are constructed of either fiberglass or carbon steel. The storage tanks are used to store wastes (used oil), chemicals (KCL water), and fuels (diesel and LPG). All of the ASTs are surrounded by secondary containment with the exception of the LPG storage tank. Secondary containment is provided by plastic lined earthen dikes. All secondary containment areas have the capacity to hold at least 133% of the volume of the tank within the containment area. There are no drains or underground piping associated with these areas. Should an accumulation of fluids/rainfall occur within the confines of the containment areas, the contents are inspected and characterized in accordance with State and Federal regulations prior to discharge/disposal.

The abandoned concrete wash pad with sump and the two abandoned leech fields (Class V injection wells) were abandoned prior to and have not been used since Pate Trucking took over the facility in September 1995.

The drum storage area consists of a concrete pad (former wash pad) that is dedicated for the temporary storage of chemical drums which contain various chemicals used in the oilfield during well workover and completion operations. Chemicals are stored at the area for short periods of time (typically 1 to 7 days) prior to transport to the job site by Pate Trucking personnel.

**Pate Trucking Company, Inc.**

The abandoned water well is enclosed in a metal shed and secured by a padlock. The active water well is enclosed in a metal shed and used to supply water for the office septic system.

The unlined fish pond was constructed for decorative purposes only and is surrounded by an earthen berm to prevent the inflow of any storm water runoff / surface spills from the facility.

The active leach field adjacent to the office building is used to dispose of domestic sewage generated from the office bathrooms. No other waste streams are mixed with sewage

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

<b>Table 1 Materials Stored or Used at the Hobbs, New Mexico Facility Pate Trucking Company, Inc.</b>				
<b>Category per NMOCD Discharge Plan Guidelines</b>				
<b>Material Stored</b>	<b>General Composition</b>	<b>Solid or Liquid</b>	<b>Container Type</b>	<b>Volume Stored</b>
<b>Category 1. Drilling Fluids</b>				
Not applicable	None	None	None	None
<b>Category 2. Brines (KCL, NaCl, etc.)</b>				
Claytrol-TCS	Quaternary ammonium compound	solid	lined paper	40 sacks
KCL water		Liquid	AST	250 bbls
<b>Category 3. Acids/Caustics (MSDS provided in Appendix 1)</b>				
Not applicable	None	None	None	None
<b>Category 4. Detergents/soaps</b>				
Chemex Super Foamer -A	Ammonium salt of sulfated liner alcohol ethoxylate	Liquid	55-gal drum	1 drum
<b>Category 5. Solvents and degreasers (MSDS provided in Appendix 1)</b>				
Mineral Spirits	Petroleum Distillates	Liquid		5 gallons
Kerosene	Petroleum Distillates	Liquid		5 gallons
<b>Category 6. Parafin Treatment/Emulsion Breakers (MSDS provide in Appendix 1)</b>				
Paratrol X-10	Parafin solvent blend	Liquid	Drum	*
AKA Surfac -10	Surfactant blend	Liquid	Drum	*
<b>Category 7. Biocides (MSDS provided in Appendix 1)</b>				
Not applicable	None	None	None	None
<b>Category 8. Others</b>				
HD-5 Propane	Propane, ethane, propylene	Liquid	AST	1000 gal
No. 2 Diesel Fuel	Light hydrocarbon distillates	Liquid	AST	1000 gal
Fleet Heavy Duty Motor Oil	Solvent refined hydrocarbon distillates	Liquid	1 gallon plastic	24 gal
Antifreeze	Inhibited Ethylene Glycol	Liquid	Drum	55 gal
* The volume of chemical drums temporarily stored prior to transport will vary by job.				

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

<b>Table 2</b> <b>Sources and Quantities of Effluent and Waste Solids Generated at the Hobbs, New Mexico Facility</b> <b>Pate Trucking Company, Inc.</b>			
<b>Category per NMOCD Discharge Plan Guidelines</b>			
<b>Effluent Type</b>	<b>Volume Generated</b>	<b>Additive Type</b>	<b>Additive Volume</b>
<b>Category 1. Truck Wastes (Original Contents Trucked)</b>			
Not applicable	None	None	None
<b>Category 2. Truck, Tank, and Drum Washing</b>			
Oil/water emulsion generated from cleaning of truck tanks *	20 bbls/month	Residues of KCL water, crude oil	10 gal/month
<b>Category 3. Steam Cleaning of Parts, Equipment Tanks</b>			
Not applicable	None	None	None
<b>Category 4. Solvent/Degreaser Use</b>			
Sediment residue generated from cleaning small tools/parts	0.2 gal/month	None	None
<b>Category 5. Spent Acids or caustics, or Completion Fluids</b>			
Not applicable	None	None	None
<b>Category 6. Waste Slop Oil</b>			
Not applicable	None	None	None
<b>Category 7. Waste Lubrication and Motor Oils</b>			
Used motor oils from company vehicles	55 gal/month	None	None
<b>Category 8. Oil Filters</b>			
Used oil filters from company vehicles	30 filters/month	None	None
<b>Category 9. Solids and Sludges from Tanks</b>			
Sediment residue generated from cleaning of truck tanks *	1 bbl/month	None	None
<b>Category 10. Painting Wastes</b>			
Various types of non-lead base paints and hydrocarbon based thinners	1 gal/year	None	None
<b>Category 11. Sewage</b>			
Domestic sewage generated from Office. No other waste streams are mixed with sewage	50 gal/day	None	None
<b>Category 12. Other Waste Liquids</b>			
Not Applicable	None	None	None
<b>Category 13. Other Waste Solids</b>			
Industrial solid waste - office trash, paper, plastic, etc.	150 lb/month	None	None
Spent automotive batteries **	6 batteries/yr	lead, acid	Unknown
* Tank truck cleaning operations are performed off site at the Parabo Disposal Facility with the rinseate, residues, and solid waste generated from these operations disposed of at the NMOCD permitted facility.			
** Used batteries are exchanged for new batteries at the time of replacement.			

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

1. Truck Wastes (Original Contents Trucked) -Not applicable
2. Truck, Tank, and Drum Washing - No washing of vehicles, tanks, or drums is currently performed at the Pate Trucking facility. All exterior washing of equipment and vehicles is performed at off site commercial facilities. Chemical drums present at the facility typically belong to a client/chemical service company and are temporarily stored on a concrete pad one to seven days prior to transport to the job site. Pate Trucking provides drum storage / transport service only. The client / chemical service company is responsible for the application of the chemical at the job site and the collection, storage, and disposal of any wastes generated.
3. Steam Cleaning of Parts, Equipment, or Tanks - No steam cleaning of parts, equipment, or tanks is currently performed at the Pate Trucking facility. Periodic cleaning and inspection of tank interiors is performed off site by commercial facilities equipped for these services.
4. Solvent/Degreaser Use - Solvent/degreaser use at the facility is restricted to a small parts cleaning unit located in the shop building. This unit is a closed loop system which recirculates the solvent. No wastes generated by the unit are disposed of at the facility.
5. Spent Acids or Caustics, or Completion Fluids - Not applicable
6. Waste Slop Oil - Not applicable
7. Waste Lubrication and Motor Oils - Waste oil from vehicle maintenance operations performed on site by Pate Trucking personnel is collected and stored in a labeled above-ground storage tank. The AST is enclosed within a lined secondary containment. The stored oil is periodically removed (approximately every 90 days) for reclaiming by a permitted used oil recycler. All reclaimed oil is manifested prior to transport.
8. Oil Filters - Oil filters removed during vehicle maintenance are drained of excess oil and stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.
9. Solids and Sludges from Tanks - No washing of vehicles, tanks, or drums is currently performed at the Pate Trucking facility. All tank truck cleaning operations are performed at an off site commercial facility (Parabo Disposal Facility). The rinseate, residues, and solid waste generated from these operations is disposed of at the NMOCD permitted facility

10. Painting Wastes - Painting of tanks, vehicles, and equipment is performed off-site by commercial facilities. Any painting wastes generated by occasional touch-up work performed by Pate Trucking personnel are allowed to dry and the solids stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.
11. Sewage - Domestic sewage from the Pate Trucking office is discharged through the active septic system located north of the office building. No other waste streams are mixed with the sewage.
12. Other Waste Liquids - Not applicable
13. Other Waste Solids - Industrial solid waste consisting of general refuse (office trash, paper, plastic, etc.) is stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.

#### **IX. Proposed Modifications**

1. Close the two abandoned leach fields in accordance with the Unlined Surface Impoundment Closure Guidelines published by the NMOCD. Verify that all lines that could permit effluent to enter the two abandoned leach systems (Class V. injection wells) are plugged. Sample the soils, remove the leach systems, and close the two sites in accordance with the NMOCD Closure Guidelines. Closure operations will follow a work plan that has been submitted to and approved by the NMOCD prior to initiating closure. Pate Trucking Company plans to begin closure activities within one month of plan approval and complete the remediation activities within three months of the scheduled start date.
2. Plug and abandon the inactive water well. The procedure will include developing, water sampling, and plugging the well with a non-shrinking grout in accordance with applicable regulations. Plugging operations will follow a work plan that has been submitted to and approved by the NMOCD prior to initiating closure. Pate Trucking Company plans to begin closure activities within one month of plan approval and complete the remediation activities within three months of the scheduled start date.

#### **X. Inspection, Maintenance, and Reporting**

Chemical and waste storage area facilities are visually inspected routinely (daily) for leaks, corrosion or integrity problems; accumulated liquids in containment areas; improper labeling and storage practices; and open or deteriorated containers. Each storage area (except for the temporary drum storage area) is enclosed with in a plastic

lined earthen berm. All chemical and waste storage areas are isolated from other potential waste streams, and contain no buried piping.

Normal maintenance of the material storage facilities is performed by facility personnel under supervision of the General Manager. Routine maintenance includes inspection of storage areas, remediation of minor spills resulting from normal site operations which pose no threat to personnel and the repair of leaking fittings or valves.

The manager or Qualified Individual will determine which activities can be performed by facility personnel and which need to be contracted out due to the potential hazards involved.

Inspection and maintenance records are maintained in the Pate Trucking Office. The records include inspection dates, results, actions taken, and modifications or repairs performed. Inspection and reporting procedures for the ASTs, fish pond, and below grade sump are documented in the Spill Response / Contingency Plan inclosed in Appendix C.

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

A copy of the Spill Response / Contingency Plan for the site is presented in Appendix C.

**XII. Site Characteristics**

1. Surface Bodies of Water and Water Wells

A field survey of the facility and surrounding area identified no bodies of water or streams, or other watercourses within one mile of the Pate Trucking Facility, other than the on-site fish pond. A storm water drainage basin operated by the city of Hobbs is located approximately 3/4 of a mile north-northwest of the facility. The drainage basin is located in an upgradient position relative to the facility. No standing water was observed in either the fish pond or the drainage during the preparation of this Discharge Plan. No groundwater discharge sites (seeps, springs, marshes, or swamps) were identified with in one mile of the facility.

Approximately 13 water wells were identified within a 1/4 mile radius and 41 wells were identified with in an one mile radius of the facility during a review of the water well completion files at the New Mexico State Engineers Office (NMSEO) in Roswell, New Mexico. According to the well records submitted to the NMSEO, the well depths for the area ranged from approximately 70 feet to 170 feet. Static water levels reported at the time the wells were completed ranged from 32 feet to 80 feet below ground surface. The wells are completed in the Ogallala Formation (primary water producing zone in the site area). The data obtained from the NMSEO is presented in Tables 3 and 4.

2. Water Quality

Water quality within the High Plains Aquifer in the site area is controlled by the composition of the recharge from rainfall and leakage from adjacent formations. Based on a review of the available published data, groundwater in the site area contains total dissolved solids (TDS) concentrations of approximately 150 parts per million (ppm) to 200 ppm. Water quality data obtained from the NMSEO reported chloride levels ranging from 188 ppm to 830 ppm (Table 3). No water quality data was available for the two wells located on the facility. However, these wells will be sampled during plugging and abandonment of the inactive water well. The analytical will be included in the well plugging report and forwarded to the NMOCD when completed.

3. Geology/Hydrology

The site is located on the northwestern margin of the Central Basin Platform, a north-south trending structural high that separates the Midland Basin to the east from the Delaware Basin to the west. Geologic formations at depth beneath the site dip gradually toward the south and west into the Delaware Basin and generally increase in thickness basinward. The shallower formations (Middle Triassic-age and younger) were deposited on several erosional unconformities and generally dip gradually toward the southeast.

The geologic formation that outcrops in the site area is the Ogallala Formation of Tertiary age. The Ogallala Formation is often covered by a thin layer of wind-deposited (eolian) dune sands consisting of reworked Recent age or Quaternary age alluvium. The Ogallala Formation ranges in thickness from approximately 100 to 200 feet and rests unconformably on Triassic-age sediments in the site area. Thickness of the Ogallala Formation is primarily controlled by the paleotopography of the sub-Ogallala erosional surface. The formation attains its greatest thickness along paleovalleys and thins along paleodivide areas.

The primary source of groundwater in the site area is provided by the High Plains Aquifer. The High Plains Aquifer is composed of hydraulically connected portions of the Quaternary Alluvium and Ogallala Formation. The contact between the Tertiary-age Ogallala formation and underlying Triassic-age sediments is an erosional unconformity that slopes regionally to the southeast. The unconformity is marked by an irregular thickness of Triassic-age shales, and sands (red beds). These red beds typically represent the lower limit of usable (potable) water in the area.

Based on a review of the available well logs of the site area, the depth to the water table is approximately 50 to 60 feet below ground surface. Groundwater movement beneath the site is toward the east-southeast and appears to parallel the drainage trend of the local topography.

The subsurface of the site consists of three general units; an upper unit (0 to 5 feet thick) of well-drained sandy loam belonging to the Kimbrough Soil Series; a middle unit (extending from the base of the loam to a depth of approximately 45 feet) composed of interbedded calcareous sands (caliche), limestones, and silicious sandstone; and a third unit composed of fine-grained, slightly calcareous to calcareous sands, clays, and often a scattered gravel. This unit extends from approximately 45 feet to the top of the Triassic-age shales, and sands (red beds).

**Table 3**  
**Water Quality of Water Wells with 1/2 Mile of Pate Trucking Facility**  
**Analytical Results Obtained from the State Engineers Office**

Well Owner	Permit No.	Total Depth	Depth to Water	Water Zone	Date Sampled	Well Use	Well Township	Well Range	Well Section	Well Location	Water Chloride	Water SC	Quality Temperature	Quality TDS
Marroquin, Frank	W-1	100	--	TOG	12/20/79	IRR	T19S	R38E	15	41214	188	1348	--	--
Marroquin, Frank	W-2	100	--	TOG	12/20/79	DOM	T19S	R38E	15	412321	186	1049	--	--
Marroquin, Frank	W-2	100	--	TOG	11/29/84	DOM	T19S	R38E	15	412321	276	1331	--	--
Marroquin, Frank	W-2	100	--	TOG	07/12/90	DOM	T19S	R38E	15	412321	450	1988	--	--
Terry, Johnny	W-3	--	--	TOG	11/29/84	DOM	T19S	R38E	15	412322	284	1602	--	--
Viro-Montes	W-4	--	--	TOG	11/12/84	DOM	T19S	R38E	15	41413	158	1178	--	--
Champion Chemical	W-5	--	--	TOG	11/30/79	DOM	T19S	R38E	15	422444	186	1405	66	--
Champion Chemical	W-6	123	--	TOG	08/17/77	DOM	T19S	R38E	15	424233	504	2370	82	--
Champion Chemical	W-6	123	--	TOG	11/29/84	DOM	T19S	R38E	15	424233	372	2208	--	--
Champion Chemical	W-7	142	--	TOG	08/25/65	COM	T19S	R38E	15	42441	830	3110	--	--

Permit No. is issued by State Engineer. Where no well completion record was identified in State files a unique number beginning with a "W" was used to reference the well in this report.

Location uses state number code

Well Use - DOM=Domestic, IRR=Irrigation, COM=Commerical, OWD=Oil well drilling

-- No data available

**Table 4**  
**Summary of Water Wells Identified with in 1/2 mile of Pate Trucking Facility**  
**Well Records on File with the State Engineers Office**

Well Owner	Permit No.	Total Depth	Depth to Water	Date Completed	Date Plugged	Well Use	Well Township	Well Range	Locatio Section	Locatio Location
Narroquin, Francisco	L-6759	100	45	03/10/71	--	DOM	T19S	R38E	15	221
Warroquis, Francisco	L-6858	100	45	12/06/71	--	DOM	T19S	R38E	15	230
Townsend, Bobby	L-7357	101		04/12/75	--	DOM	T19S	R38E	15	24221
Lee, G. D.	L-8046	130	58	03/20/80	--	DOM	T19S	R38E	15	244
Sherrill, Wilbur	L-7359	117	57	04/11/75	--	DOM	T19S	R38E	15	24444
Dean, T. M.	L-2667	108	70	02/21/57	--	DOM	T19S	R38E	15	400
Bonner, C. C.	L-7512	100	32	04/14/76	--	--	T19S	R38E	15	4122
Weldy, G. W.	L-7882	100	32	04/19/79	--	DOM	T19S	R38E	15	41100
Glasspoole, Frank	L-6101	100	38	12/22/85	--	DOM	T19S	R38E	15	41131
Clark, J. C.	L-4489	100	41	08/28/60	--	DOM	T19S	R38E	15	413
Fulkerson, James	L-10046	120	70	11/26/88	--	DOM	T19S	R38E	15	4130
Benny, Bobby	L-9821	100	51	05/03/86	--	DOM	T19S	R38E	15	41340
Dobbins	L-9012	100	32	08/02/82	--	DOM	T19S	R38E	15	414
Dobbins, Hazel	L-9310	120	58	08/29/83	--	DOM	T19S	R38E	15	414
Dobbins, B. R.	L-7381	100	50	05/16/75	--	DOM	T19S	R38E	15	41412
Attaway, Neal	L-5013	100	47	04/09/63	--	DOM	T19S	R38E	15	420
Scott, R. W.	L-9896	100	38	02/17/87	--	DOM	T19S	R38E	15	42124
Ballew, Wayne	L-4107	112	60	04/23/59	--	DOM	T19S	R38E	15	422
Barton, J. E.	L-4622	70	46	06/01/61	--	DOM	T19S	R38E	15	422
Morrow, Terry	L-7379	120	44	05/31/75	--	DOM	T19S	R38E	15	42312
Phar, T.	L-4539	100	48	11/05/60	--	DOM	T19S	R38E	15	424
Hardin & Houston	L-6733	123	50	11/16/79	--	DOM	T19S	R38E	15	424233
Spradley, Jim	L-10322	133	44	04/13/93	--	D&S	T19S	R38E	15	42424
Hardin & Houston	L-5623	142	52	06/06/64	--	COM	T19S	R38E	15	42441
Bingham, M. L.	L-2689	83	49	11/30/54	--	--	T19S	R38E	15	444
Bingham, N. L.	L-3248	123	48	04/28/58	--	IRR	T19S	R38E	15	44412
Aaron, A. A.	L-8352	118	50	09/17/80	--	DOM	T19S	R38E	15	44
Tarber, Joe	L-10138	170	60	12/15/90	--	IRR	T19S	R38E	15	44333
Wallen Production	L-8250	125	80	01/12/80	--	OWD	T19S	R38E	15	34244
Younger Construction	L-3658	120	50	08/28/57	--	DOM	T19S	R38E	14	310
Selman, J. A.	L-1021	168	75	02/22/57	--	IRR	T19S	R38E	14	222
Selman, Frank	L-345	124	--	10/26/47	--	--	T19S	R38E	14	142
Selman	W-8	125	65	04/13/53	--	--	T19S	R38E	14	240
Caprock Communications	L-10011	140	60	06/15/88	--	DOM	T19S	R38E	14	1110

Permit No. is issued by State Engineer. Where no well completion record was identified in State files a unique number beginning with a "W" was used to reference the well in this report.

Location uses state number code

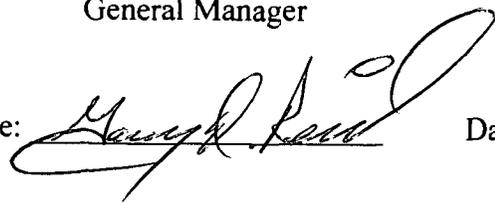
-- No data available

Well Use - DOM=Domestic, IRR=Irrigation, COM=Commerical, OWD=Oil well drilling

**XIV. Certification**

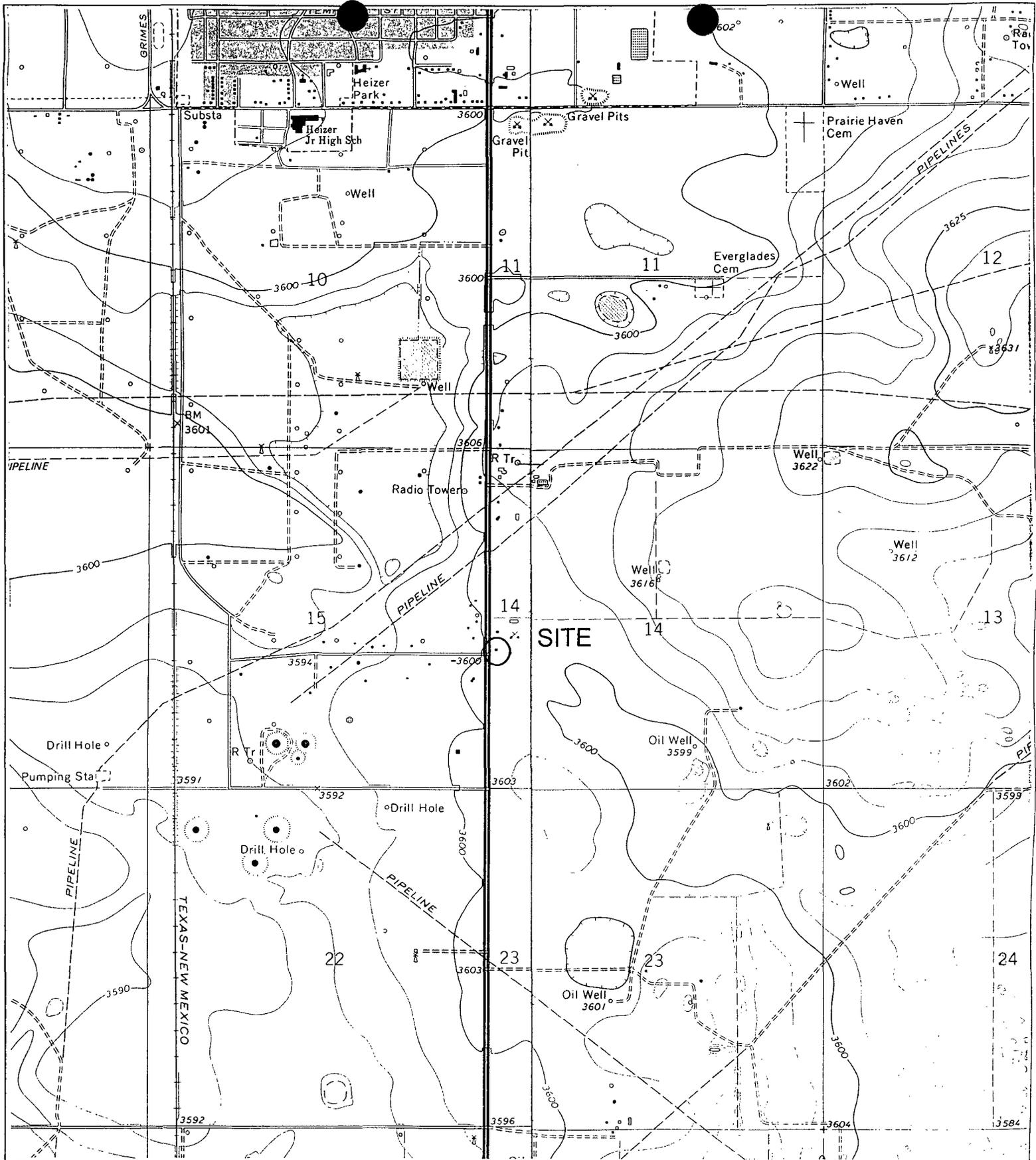
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Gary Reid  
Title: General Manager

Signature:  Date: 5/21/96

**Appendix A**

**Figures**



**USGS TOPOGRAPHIC MAP**

HOBBS WEST & HOBBS EAST  
 QUADRANGLES  
 LEA Co., NEW MEXICO  
 1969 PHOTOREVISED 1979



**PATE TRUCKING Co., Inc.**

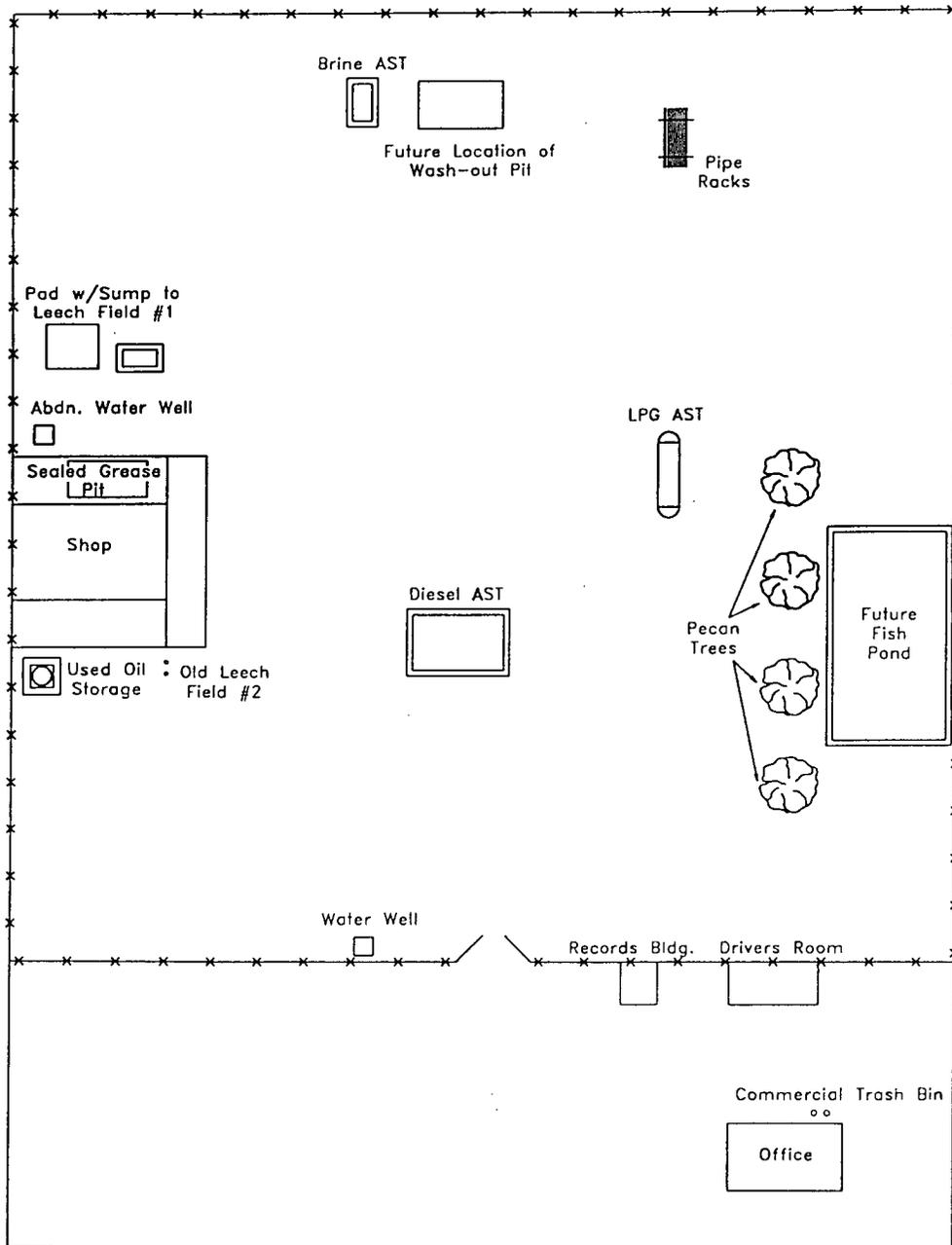
CONTOUR TOPOGRAPHY  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC. 14 T19S, R38E  
 HOBBS, NEW MEXICO

SCALE: 1" = 2000'

JOB #

SHEET 1 OF 2

FILE

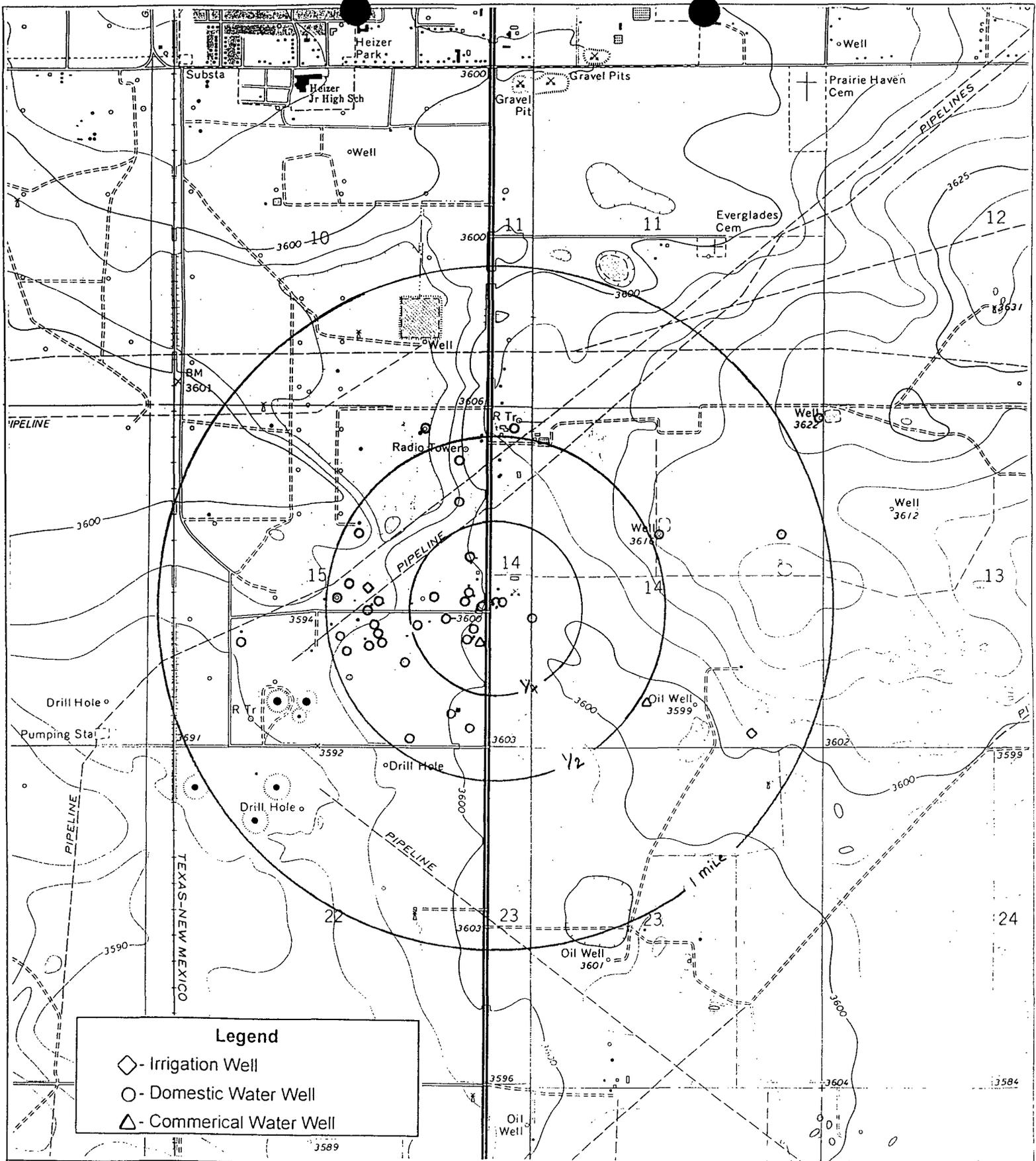


AST = Aboveground Storage Tank

# PATE TRUCKING Co., Inc.

SITE MAP  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC,14, T19S, R38E  
 HOBBS, NEW MEXICO

DATE:2-7-96	DRAWN M.F.G.	REV. DATE	DIV
SCALE: 1" = 100'		JOB #	
DRAWING 3 OF 3		FILE:	



**Legend**

- ◇ - Irrigation Well
- - Domestic Water Well
- △ - Commercial Water Well

**USGS TOPOGRAPHIC MAP**

HOBBS WEST & HOBBS EAST  
 QUADRANGLES  
 LEA Co., NEW MEXICO  
 1969 PHOTOREVISED 1979



**PATE TRUCKING Co., Inc.**

WATER WELL LOCATION MAP  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC. 14 T19S, R38E  
 HOBBS, NEW MEXICO

SCALE: 1" = 2000'

JOB #

SHEET 1 OF 2

FILE

**Appendix B**  
**Material Safety Data Sheets (MSDS)**

H-2  
F-0  
R-0  
S-0



# Chemical Company

P. O. Box 1306 • Phone (505) 746-6611  
Artesia, New Mexico 88210

## PRODUCT INFORMATION

### CI-119 Corrosion Inhibitor

*"Cor-Trol"*

#### DESCRIPTION

CI-119 is an oil soluble, water dispersible corrosion inhibitor formulated from an oil soluble complex amide and an oxalkylation of a complex amine.

CI-119 has excellent mobility in both phases of the producing system and exhibits excellent film persistency. It is formulated for use as a general purpose inhibitor which can be applied by chemical injection truck or conventional lubricator.

#### TYPICAL PHYSICAL PROPERTIES

FORM	Liquid
DENSITY @ 60°F (lb/gal)	7.85
POUR POINT	Below 0°F
FLASH POINT	Above 140°F
SOLUBILITY	Oil soluble; water dispersible

#### APPLICATION METHOD

CI-119 may be applied by chemical injection truck in which case it should be dispersed in fresh water or crude oil in a ration of 1 part chemical, 40 parts fluid and overflushed with one or more bbl water or oil. The overflushing is not mandatory; however, will insure inhibitor reaches bottom.

Application by means of a conventional lubricator is also very effective if followed by circulation and flushing with one or more bbl of produced fluid down the casing annulus. Dosage amounts and frequency of treatment are determined by individual well characteristics. All the possible variables cannot be covered in this product description.



**Chemical Company**

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HANDLING PRECAUTIONS

CI-119 is non-toxic and is not considered dangerous. However, reasonable precautions should be taken to avoid physical contact. Skin irritations may result from prolonged exposure. Rinse affected areas with fresh water and wash with soap and water.



**Chemical Company**

P. O. Box 1306 • Phone (505) 746-6611

Artesia, New Mexico 88210

MATERIAL SAFETY DATA SHEET

Zia Code: Cor-Trol-2 Corrossion Inhibitor

Chemical Name: Not applicable; Blend

OSHA: Component

Irritant: Strong oxidizing agents, plus alkalines and Fatty Acids.

First Aid and Nature of Hazard.

Eye Contact:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.  
Irritating, but does not injure eye tissue.

Skin Contact:

Remove grossly contaminated clothing, and launder before reuse.

If irritation persists, seek medical attention. Low order of toxicity.

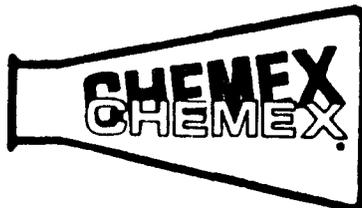
Frequent or prolonged contact may irritate and cause dermatitis.

Inhalation:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Ingestion:

First aid not normally required . Low order of toxicity.



PRODUCTION - CHEMICALS - DRILLING

H-1  
F-0  
R-0  
S-0

PRODUCT INFORMATION

TBC-2 Surfactant  
(AKA Surfac-10)

DESCRIPTION

Chemex TBC-2 surfactant is a non-ionic surface active agent. It is formulated for use in all oil field brines and fresh water. The product is compatible with both acid and caustic solution.

Oil coated and impregnated scale consisting of calcium carbonate, calcium sulfate, and iron sulfide are removed more effectively by the use of Sur-Fac 10 with an acid or caustic solution. Oil, suspended in the workover solution.

Demulsifiers incorporating Sur-Fac 10 in the formulation are most effective in water wetting iron sulfide particles.

TYPICAL PHYSICAL PROPERTIES

FORM	Liquid
DENSITY @ 60°F (lb/gal)	8.42
POUR POINT	15°F
SOLUBILITY	Water soluble; oil dispersible

Contains no arsenic, heavy metals, or organic chlorine compounds.

APPLICATION METHOD

**INJECTION WELLS:** A controlled dosage of .5% -1.0% based upon the water injection rate for 5-30 minutes will emulsify heavy hydrocarbons filtered out at the formation face. If the well is making fluid on vaccum, it is a simple matter to bleed 1 or more gallons into a tee in the line to the well. Example:

Assumption: An injection well at the rate of 1 bbl/1 minute and a desired chemical dosage of .5% for 20 minutes.

Find: Gallons of chemical to be fed during a 20 minute "wash".  
Solution: 42 gal/min x .005 x 20 min. Answer: 4.2 gal.

**ACID OR CAUSTIC SOLUTIONS:** 1 to 2% concentration in an acid or caustic solution is adequate to improve the effectiveness of either chemical treatment.

PHONE  
505. 746.6100



P. O. Box 423  
ARTESIA, NEW MEXICO  
88210

PRODUCTION - CHEMICALS - DRILLING

Sur-Fac 10 will dissolve in concentrated solution of electrolyte at low or high pH without degradation or loss of effectiveness.

KOBE SYSTEM: Sur-Fac 10 injected continuously at a rate of 1 gal/1000 bbl of power oil will help prevent pump sticking and it is recommended that fresh water be maintained on the bottom of the power oil tank into which 10 to 20 gallons of Sur-Fac 10 is added. Chloride levels would be checked periodically and fresh water added as needed.

#### HANDLING PRECAUTIONS

Sur-Fac 10 is a surfactant that is non-toxic and requires no special handling precautions.



**Chemical Company**

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MATERIAL SAFETY DATA SHEET

Zia Code TBC-2

Chemical Name: Not applicable, Blend

OSHA: Component

Irritant: Primary skin irritant and defatting agent.  
Nonionic surfactant/detergent.

First Aid and Nature of Hazard

Eye Contact:

Flush with large amounts of water until irritation subsides. If persists, seek medical attention. May cause reddening and conjunctivites.

SKIN CONTACT:

Remove grossly contaminated clothing and launder before reusing.

INHALATION:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

INJECTION:

Injection of this material may result in toxic effects.

H-2  
F-4  
R-0  
S-□



## **ZIA Chemical Company**

P. O. Box 1306 • Phone (505) 746-6611

Artesia, New Mexico 88210

### PRODUCT INFORMATION

#### Paratrol X-10 Paraffin Solvent

#### DESCRIPTION

Paratrol X-10 contains a combination of ingredients which have proven to be the most effective broad spectrum paraffin solvent in the oil producing industry. Paratrol will dissolve both microcrystalline wax and asphalt-base heavy hydrocarbons.

#### TYPICAL PHYSICAL PROPERTIES

FORM.	Liquid
DENSITY @ 60°F (lb/gal)	9.21
FLASH POINT	Below 50°F
POUR POINT	-20°F
SOLUBILITY	Oil soluble, water insoluble

Contains no arsenic compounds or chlorinated hydrocarbons.

#### APPLICATION METHODS

Generally, paraffin solvents are best applied by periodic batch treatment and Paratrol X-10 is no exception. In pumping wells, five or ten gallons poured into the tubing head and allowed to soak overnight will often facilitate pulling the rods out.

Flow lines are treated with lubricators near the well. Dosage and frequency of treatment vary widely according to the rate of oil production and severity of the condition.

Continuous injection of Paratrol X-10 into flow lines has been reported to be very successful for paraffin control.

Another method of paraffin control is the use of PI-1200 Paraffin Inhibitor when conditions are suitable for the application of this product. Refer to the product information sheet on PI-1200 in this manual for further details.

#### HANDLING PRECAUTIONS:

**WARNING!!** Care should be exercised to prevent vapor exposure to sparks



**Chemical Company**

P. O. Box 1308 • Phone (505) 746-6611

Artesia, New Mexico 88210

or flame. Store in a ventilated area away from engines, electric motors, and open flames.



# ZIA Chemical Company

P. O. Box 1306 • Phone (505) 746-6611

Artesia, New Mexico 88210

## MATERIAL SAFETY DATA SHEET

Zia Code: Paratrol X-10

Chemical Name: Not Applicable, Blend

Osha: Component

Physical Data: Boiling Point 115.8 C - 240 F  
Percent Volatiles By Volume - 100  
Freezing Point - 83.5 C - -118 F  
Flash Point - Below 75 F  
Soluability - Oil Soluable  
Water Dispersible

### Fire & Explosion Hazard Data:

Avoid heat, open flame, sparks, and contact with strong oxidizing agents.

Extinguishing Media: Use CO<sup>2</sup> or dry chemical for small fires; alcohol-type aqueous film-forming foam for large fires.

#### Special Fire Fighting Procedures:

Do not enter any enclosed or confined fire space without protective equipment. This may include self contained breathing apparatus.

### Emergency & First Aid Procedures:

#### Eye Contact:

Flush eyes with water for at least 15 minutes. Contact physican.

#### Skin Contact:

Remove contaminated clothing. Flush skin with water. If irritation persists contact a physican. Do not reuse clothing until cleaned.

#### Inhalation:

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artifical resperation if not breathing. Get mdeical attention.

#### Ingestion:

Induce vomiting of conscious victim immediately by giving no more than two glasses of water and touching finger to back of victims throat. Seek medical attention.

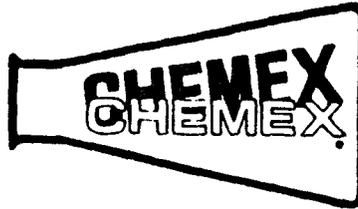
### Reactivity:

Stability - Stable

Hazardous Polymerization - Will Not Occur

PHONE  
505.746.6100

P. O. Box 423  
ARTEBIA, NEW MEXICO  
86210



PRODUCTION - CHEMICALS - DRILLING

PRODUCT INFORMATION

Chemex Super Foamer-A  
*WASH DOWN SOAP*

DESCRIPTION

*WASH DOWN SOAP*

Chemex Super Foamer-A is a unique foamer having highly superior qualities in forming thick, stable foam which resist the ordinary destructive effects of chlorides, clays and other contaminants present in an air or gas system.

TYPICAL PHYSICAL PROPERTIES

APPEARANCE	Liquid
ODOR	Mild
COLOR VCS	2-4
TOTAL SOLIDS	60 - 63
NON-IONIC-%	Less than 3
pH	7
POUNDS PER GAL	8.5
FLASH POINT (COC), °F	174

CHEMICAL COMPOSITION:

Ammonium Salt of Sulfated Linear Alcohol Ethoxylate

SUGGESTED USES

Chemex Super Foamer-A is readily and completely biodegradable possesses high foaming properties in both soft and hard water, is an excellent emulsifier and detergent and is highly suitable for a wide variety of household and industrial uses. Primarily Chemex Super Foamer-A was designed to be used as a foamer for air drilling.

HANDLING PRECAUTIONS

This material is non-toxic and is not considered dangerous to handle.

H-1  
F-0  
R-0  
S-D



**ZIA Chemical Company**

P. O. Box 1306 • Phone (808) 746-6611

Artesia, New Mexico 88210

MATERIAL SAFETY DATA SHEET

Zia Code: De-Trol, <sup>WASH DOWN</sup> ~~SOAP~~, Degreaser

Chemical Name: Not applicable, Blend

OSHA: Component

Irritant: Oxyalkylated Phenol, Sulfanic Acid Salt Solution

First Aid and Nature of Hazard

Eye Contact:

In case of eye contact, flush with copious amounts of clean water with eyelids open. If irritation persists, seek medical attention.

Skin Contact:

Remove grossly contaminated clothing wash skin with mild soap/water. Launder clothing before reuse.

Inhalation:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Ingestion:

Ingestion of this material may result in toxic effects.



Technical Limitation:

- Claytrol is highly concentrated but highly cost effective.

Job Design Data:

Recommended loading is ¼ to 2 gal per 1000 of fresh water, depending on mineralogy of the formation. At this loading Claytrol will mimic KCl in terms of the swelling and sloughing of clay minerals in the reservoir rock.

Comparative Performance Data:

Performance of KCl substitutes can be determined by their effect on the permeability of porous media. The procedure accompanying this report was used to evaluate several commonly available materials. The results of those tests are reported below.

Although KCl has obvious advantages, as seen in the data, the organic temporary clay control products have many operational, environmental and technical pluses. Claytrol, as can be seen, is as good as or better than the other commercial agents.

KCl Substitute	Loading gal/Kgal	Flow Rates		Treated Water Flow @ 30 cm <sup>2</sup> , min	Fresh Water Shut-off, %	Capillary Suction Time, sec
		Treated water % brine	Regained brine % initial			
desired range -		>30	>40	<10	>50	>400 specific
2% KCl	2%	144%	80%	1.63	83%	600 standard
NH <sub>4</sub> Cl slurry	5	52%	37%	2.15	65%	384
Clu-Sta 2	5	30%	16%	9.28	23%	
BIO - 31	5	9%	8%	18.33	42%	129
AY - 80	5	12%	22%	13.18	20%	14
SP - 292	5	20%	42%	13.62	7%	14
TMAC (33%)	5	29%	35%	6.62	70%	492
TMAC (50%)	2	39%	42%	5.0	65%	799
ETMAC (33%)	5	30%	23%	10.15	74%	
diquat	5	7%	12%	26.97	17%	699
Claytrol	2	86%	49%	1.7	61%	993
Claytrol	2.5	39%	28%	5.9	61%	813
Claytrol	5	43%	46%	5.3	75%	388
Claytrol	10	88%	80%	1.2	78%	115

Safety: Refer to the Material Safety Data Sheet(MSDS).

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P.O. Box 557  
Marlow, OK 73055  
(405)658-6608

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## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

## ===== SECTION I - IDENTIFICATION =====

COMPANY NAME..... FRAC TECH DIVISION, PLAINSMAN TECHNOLOGY, INC.  
P.O. BOX 557  
MARLOW, OK 73055  
(405)658-6608

EMERGENCY PHONE NUMBER... DOMESTIC (800)732-9876  
INTERNATIONAL (817)877-4020

EFFECTIVE DATE..... January 31, 1991  
REVISED DATE..... January 17, 1995

CHEMICAL NAME..... KCl Substitute  
TRADE NAME..... CLAYTROL-TCS(TM)  
CHEMICAL FAMILY..... Quaternary ammonium compound  
CHEMICAL FORMULA..... C<sub>5</sub>H<sub>14</sub>ClNO.H<sub>2</sub>O

## ===== SECTION II - COMPONENTS =====

HAZARDOUS COMPONENTS	HAZARDOUS %	PEL/TLV	CAS #
None	N/A	N/A	N/A

## ===== SECTION III - PHYSICAL DATA =====

BOILING Point(F)..... >212°F (100°C)  
FREEZING POINT (F)..... Less than 0°F  
VOLATILITY/VOL(%)..... N/A  
MELTING POINT..... Information not available  
VAPOR PRESSURE (mm Hg)... Information not available  
VAPOR DENSITY (Air=1)... Information not available  
SOLUBILITY IN H<sub>2</sub>O..... Completely soluble in water  
APPEARANCE/ODOR..... Colorless to pale yellow, amine odor  
SPECIFIC GRAVITY (H<sub>2</sub>O=1). 1.06  
EVAPORATION RATE..... Information not available  
PH..... 6.5 - 8.0

## ===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT..... >200°F (93°C)  
LOWER FLAME LIMIT..... N/A  
HIGHER FLAME LIMIT..... N/A  
EXTINGUISH MEDIA..... In case of fire use water spray, "alcohol" foam, dry chemical or CO<sub>2</sub> (carbon dioxide).  
FOR FIRE..... Full protective equipment including NIOSH/MSHA approved positive pressure self-contained breathing apparatus should be worn. All protective equipment should be cleaned thoroughly after use.  
UNUSUAL FIRE HAZARD..... None

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS<sup>(TM)</sup>

## =====

## SECTION V - HEALTH HAZARD DATA

=====

THRESHOLD LIMIT VALUE.... None currently established

OVER EXPOSURE EFFECTS.... None known

FIRST AID PROCEDURES..... EYES: Flush eyes with copious quantities of water for a minimum of fifteen minutes. Use fingers to ensure that eyelids are separated and that eye is being irrigated. If irritation persists consult a physician.

SKIN: Wash thoroughly with soap and water.

INHALATION: Remove from source of exposure.

## =====

## SECTION VI - REACTIVITY DATA

=====

CHEMICAL STABILITY..... Stable

CONDITIONS TO AVOID..... None known

COMPATIBLE MATERIALS... None known

DECOMPOSITION PRODUCTS... Combustion may produce carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION. Will not occur.

POLYMERIZATION AVOID..... None

## =====

## SECTION VII - SPILL OR LEAK PROCEDURE

=====

FOR SPILL ..... If material spill occurs, absorbent materials should be used to prevent runoff from entering drains, sewers or streams. Waste residue should be collected and placed in a closed container for waste disposal.

WASTE DISPOSAL METHOD.... Dispose of any residues or wastes according to prescribed statutes, regulations and guidelines, e.g., secured chemical landfill, approved chemical wastes incineration or approved (low level) discharges to municipal or on-site wastewater treatment facilities.

## =====

## SECTION VIII - SPECIAL PROTECTION

=====

RESPIRATORY PROTECTION... OSHA and ACGIH have not established specific exposure limits.

VENTILATION..... Local exhaust ventilation and/or process containment may be used to minimize worker exposure to organic vapors that may be given off.

PROTECTIVE GLOVES..... None normally required.

EYE PROTECTION..... Safety glasses and/or chemical safety goggles should be worn. The choice of protection should be appropriate to the task being performed.

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

## OTHER PROTECTIVE

EQUIPMENT..... Washing facilities should be available. Wash thoroughly after handling.

HANDLING AND STORAGE..... Containers need no special warning labels in addition to the product identity label.

 =====  
 SECTION IX - SPECIAL PRECAUTIONS  
 =====

HAZARD CLASS..... None  
 DOT SHIPPING NAME..... Not Regulated  
 REPORTABLE QUANTITY (RQ). N/A  
 UN NUMBER..... N/A  
 NA #..... N/A  
 PACKAGING SIZE..... 55 gallons

FOOT NOTES Sara Title III (Superfund Amendments & Reauthorization Act of 1986)  
 - Sections 302, 311, 312 and 313:

Section 302 - Extremely Hazardous Substances (40CFR355): This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

Sections 311 & 312 - Material Safety Data Sheet Requirements (40CFR370): Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

- n/a Immediate (acute) health hazard
- n/a Delayed (chronic) health hazard
- n/a Fire hazard
- n/a Sudden release of pressure hazard
- n/a Reactive hazard

Under Section 311, submittal of MSDS's or a list of product names to the local emergency planning commission, state emergency response commission & local fire department is required after October 17, 1989 for all hazardous substances.

Section 313 - List of Toxic Chemicals (40CFR372): This product contains the following ingredients, (with CAS# and % range) which appears on the List of Toxic Chemicals: None.

## REFERENCES

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

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# MINERAL SPIRITS

350 LBS NET  
159 KG NET

CONTAINS PETROLEUM DISTILLATES

## CAUTION!

COMBUSTIBLE LIQUID AND VAPOR.  
MAY CAUSE EYE AND SKIN IRRITATION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF INHALED  
MAY BE HARMFUL IF SWALLOWED.  
MAY CAUSE DIZZINESS AND DROWSINESS  
ASPIRATION MAY CAUSE LUNG DAMAGE.

BEFORE USING THIS PRODUCT, READ  
THE MATERIAL SAFETY DATA SHEET

KEEP AWAY FROM HEAT AND FLAME.  
AVOID CONTACT WITH EYES, SKIN AND CLOTHING  
KEEP CONTAINER CLOSED  
USE WITH ADEQUATE VENTILATION.  
WASH THOROUGHLY AFTER HANDLING.  
DO NOT TRANSFER TO UNLABELED CONTAINERS

## SPILLS OR LEAKS:

ELIMINATE ALL SOURCES OF IGNITION.  
**SMALL SPILL** — SOAK UP WITH ABSORBENT MATERIAL AND SCOOP INTO DRUMS.  
**LARGE SPILL** — DIKE AND PUMP INTO DRUMS, PREVENT MATERIAL FROM ENTERING DRAINS, SEWERS, OR WATERWAYS.  
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

FOR HELP IN A CHEMICAL EMERGENCY, CALL  
CHEMTREC — (800) 424-9300.

## FOR INDUSTRIAL USE ONLY



ODESSA  
105 PRONTO  
ODESSA, TX. 79760  
915-367-6007

## FIRST AID:

IN CASE OF CONTACT FOR EYES, IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. CALL A PHYSICIAN. FOR SKIN, FLUSH WITH WATER. WASH CLOTHING BEFORE REUSE.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

IF SWALLOWED CALL A PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

## IN CASE OF FIRE:

USE FOAM, CARBON DIOXIDE, DRY CHEMICAL, OR WATER FOG OR SPRAY.



## DANGER

AFTER THIS CONTAINER HAS BEEN EMPTIED IT MAY CONTAIN EXPLOSIVE AND HARMFUL VAPORS AND RESIDUE. KEEP AWAY FROM HEAT, SPARKS, AND FLAMES! DO NOT CUT, PUNCTURE, OR WELD ON OR NEAR THIS CONTAINER.  
DO NOT RE-USE CONTAINER FOR ANY PURPOSE UNTIL COMMERCIALY CLEANED.



NAVA REFINING COMPANY  
 P. O. BOX 159  
 ARTESIA, NM 88211-0159  
 (505) 748-3311, (505) 365-8364, (505) 365-8365 (24 Hours)

# MATERIAL SAFETY DATA SHEET

**EMERGENCY PHONE NUMBERS:**

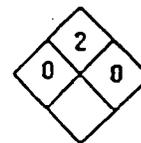
CHEMTREC: 1-800-424-9300 (for fire, spill and emergency response information)  
 NEW MEXICO POISON INFORMATION CENTER: 1-800-432-6866 (for poisoning)  
 TEXAS (EL PASO) POISON INFORMATION CENTER: (915) 533-1244 (for poisoning)  
 ARIZONA POISON INFORMATION CENTER: 1-800-362-0101 or (602) 253-3334 (for poisoning)

## KEROSENE

**SECTION 1 - PRODUCT IDENTIFICATION**

PRODUCT NAME: KEROSENE  
 FORMULA: C<sub>9</sub>H<sub>20</sub> to C<sub>16</sub>H<sub>34</sub>  
 SYNONYMS: Fuel oil #1, coal oil, range oil, kerosine  
 UN 1223

CAS NUMBER: 8008-20-6  
 CHEMICAL FAMILY: Petroleum  
 Hydrocarbon



NFPA 704 SYMBOL

**SECTION 2 - HAZARDOUS INGREDIENTS**

HAZARDOUS COMPONENTS	CAS NO.	VOL%	TLV	STEL	PEL (OSHA)	IDLH
KEROSENE (containing)	8008-20-6	>95	NA	NA	NA	NA
Napthalene	91-20-3	1	10 ppm	15 ppm	10 ppm	500 pp

**SECTION 3 - PHYSICAL DATA**

BOILING POINT: 300-575°F  
 VAPOR PRESSURE: @100°F 5 mm Hg  
 VAPOR DENSITY (AIR=1): 4.5  
 SOLUBILITY IN WATER: Insoluble  
 ODOR THRESHOLD: 1.0 ppm  
 APPEARANCE AND ODOR: Clear to yellow liquid with characteristic hydrocarbon smell

SPECIFIC GRAVITY (WATER=1): 0.8  
 ‡ VOLATILE BY VOLUME: N.A.  
 EVAPORATION RATE: No data available  
 AUTOIGNITION TEMP: 444°F

**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

CLASSIFICATION: CLASS II, COMBUSTIBLE LIQUID  
 FLASH POINT: 110-165°F (TOC)  
 FLAMMABLE LIMITS: LEL = 0.7% UEL = 5.0%  
 EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, Halon  
 SPECIAL FIRE FIGHTING PROCEDURES: Move container from fire area if possible. Use water to keep fire exposed containers cool. Use foam for spill control.  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Evacuate a radius of 1500 feet for uncontrolled fires. Vapors are heavier than air and may travel great distances and flash back. Extinguish only if flow can be stopped.

NFPA FIRE = 2 (moderate)

KEROSENE

SECTION 5 - REACTIVITY DATA

STABILITY: Stable  
HAZARDOUS POLYMERIZATION: Will not occur  
CONDITIONS TO AVOID/INCOMPATIBILITY: Strong oxidizers  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide  
NFPA REACTIVITY = 0 (minimal)

SECTION 6 - HEALTH HAZARD DATA

ROUTES OF ENTRY: Inhalation, ingestion, skin contact.  
HEALTH HAZARDS: Chronic toxicity, possible cancer, irritation to eyes, skin and mucous membranes, pulmonary edema, bronchial pneumonia, asphyxiation, liver and kidney damage, anemia or myocardial damage.  
CARCINOGENICITY: Product is not listed by NTP or IARC.  
SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of eyes, skin and mucous membranes, dizziness, headaches, respiratory arrest, coughing, irregular heartbeat, mental confusion, vomiting, blurred vision, flushing of face, slurred speech, difficulty in swallowing, weakness, pain in limbs, coma and convulsions. Also, insomnia, toxicity, psychosis, tremors, exaggerated tendon reflexes  
EMERGENCY AND FIRST AID PROCEDURES:  
INGESTION: DO NOT induce vomiting. Immediately seek medical attention. Give water to dilute, if conscious.  
INHALATION: Maintain respirations, assist with artificial respiration if needed and give oxygen if available and trained to do so. Seek medical attention. If liquid is in lungs (aspirated) seek medical care.  
EYES: Flush eyes with water for at least 15 minutes. Seek medical attention.  
SKIN: Remove kerosene soaked clothing. Wash skin with soap and water. If irritation persists seek medical attention.

NFPA HEALTH = 0 (minimal)

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate all sources of ignition. Contain spill. Use water fog to suppress vapor cloud. Use SCBA to avoid breathing vapors. Absorb liquid with sand or clay.  
WASTE DISPOSAL: Dispose in accordance with RCRA regulations. Do not put in sewers or any water course.  
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: All equipment and storage containers should be properly grounded. This material is subject to OSHA and DOT regulations. Portable metal containers should be bonded to the storage container before transferring liquid.  
OTHER PRECAUTIONS: Avoid breathing vapors. Extremely flammable. Do not weld on containers unless properly cleaned and purged using safe work procedures.

## SECTION 8 - ENVIRONMENTAL AND SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH\MSHA approved respiratory protection in areas exceeding exposure limits, the type to be determined by the degree of exposure.

VENTILATION: Use in well ventilated area. Mechanical exhaust should be explosion proof.

EYE/SKIN PROTECTION: Rubber gloves, face shields, goggles or safety glasses with side shields, coveralls.

WORK/HYGIENIC PRACTICES: Remove contaminated clothing as soon as possible. Always wash after handling hazardous chemicals.

NOTICE: This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

REFER TO DEPARTMENT OF TRANSPORTATION (DOT) EMERGENCY RESPONSE GUIDEBOOK GUIDE 27 FOR ADDITIONAL EMERGENCY INFORMATION.

This information is believed to be accurate and as reliable as information available to us. We make no warranty or guarantee as to its accuracy and assume no liability from its use. Users should determine the suitability of the information for their particular purposes.

**MATERIAL SAFETY DATA SHEET**

**BASF CORPORATION**  
**100 CHERRY HILL RD.**

**PARSIPPANY, NJ 07054**  
**(201) 316-3000**

**Original Date: 10/15/1991**  
**Revision Date: 03/31/1992**

**Emergency Telephone: (800) 424-9300 (CHEMTREC)**  
**(800) 832-HELP (BASF Hotline)**

*BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.*

**SECTION 1 - PRODUCT INFORMATION**

**Product ID: NVS 583870**  
**NAPA ANTIFREEZE**

**Common Chemical Name:**  
**INHIBITED ETHYLENE GLYCOL**

**Synonyms:**  
**ANTIFREEZE**

**Molecular Formula:**  
**MIXTURE**

**Molecular Wt.: NOT APPLICABLE**  
**Chemical Family: Glycol**

**SECTION 2 - INGREDIENTS**

<b>Chemical Name:</b>	<b>CAS #:</b>	<b>Amount:</b>	<b>PEL/TLV Data:</b>
ETHYLENE GLYCOL                      HC	107-21-1	85.0 - 95.0 %	OSHA CEIL    50    PPM
DIETHYLENE GLYCOL                    H	111-46-6	0.0 - 10.0 %	FINAL NOT ESTABLISHED

I - Denotes an IARC listed carcinogen  
 N - Denotes an NTP listed carcinogen  
 O - Denotes an OSHA carcinogen  
 H - Denotes an OSHA health hazard  
 P - Denotes an OSHA physical hazard  
 C - Denotes a CERCLA listed chemical

\*P66X See section 10A for SARA-313 list.

*9/6/3*

Product ID: NVS 583870

Page 2

## NAPA ANTIFREEZE

## SECTION 3 - PHYSICAL PROPERTIES

Color: Green  
 Form/Appearance: Liquid  
 Odor: Glycol  
 Odor Intensity: Faint

	Typical	Low-RANGE-High	U. O. M.
Spc. Gravity:	1.135		
pH:		9 - 11	SU

	Typical	Low-RANGE-High	Deg.	@ Pressure
Boiling Pt:	330		F	760 MM HG
Freezing Pt:	NOT AVAILABLE			
Decomp. Tmp:	NOT AVAILABLE			

Solubility in Water Description: Infinite

Vapor Pressure:	18	MM HG	e	20	DEG. C
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## SECTION 4 - FIRE AND EXPLOSION DATA

	Typical	Low-RANGE-High	Deg.	Method
Flash Point:	250		F	CLEVELAND OPEN CUP
Autoignition:	775		F	NONE SPECIFIED

**Extinguishing Media:**

Water fog, alcohol foam, CO2 or dry chemical extinguishing media.

**Fire Fighting Procedures:**

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Avoid breathing vapors or fumes of heated product or burning product.

**Unusual Hazards:**

Vapors from heated (above flashpoint) of product may travel to a source of ignition and flash back.

Product ID: NVS 583870

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**NAPA ANTIFREEZE****SECTION 5 - HEALTH EFFECTS**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gasses include inhalation and eye and skin contact.

**Acute Overexposure Effects:**

Contact with the eyes and skin may result in irritation. Acute overexposure to diethylene glycol and ethylene glycol can cause severe abdominal distress, CNS depression, possibly respiratory and/or kidney failure.

**Chronic Overexposure Effects:**

Chronic overexposure to diethylene glycol and ethylene glycol can cause liver and kidney damage. Animal studies indicate that ethylene glycol may be embryotoxic and teratogenic by the oral and inhalation routes.

**First Aid Procedures - Skin:**

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, get medical attention.

**First Aid Procedures - Eyes:**

Immediately wash eyes with running water for 15 minutes. If irritation develops, get medical attention.

**First Aid Procedures - Ingestion:**

If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

**First Aid Procedures - Inhalation:**

Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

**First Aid Procedures - Notes to Physicians:**

Administration of ethanol may counteract the effects of ethylene glycol, such as metabolic acidosis and renal damage.

**First Aid Procedures - Aggravated Medical Conditions:**

Individuals with preexisting diseases of the skin, respiratory disorders, or impaired function of the liver/kidneys may have

Product ID: NVS 583870

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## NAPA ANTIFREEZE

## SECTION 5 - HEALTH EFFECTS (Cont.)

increased susceptibility to excessive exposures.

**First Aid Procedures - Special Precautions:**

None

## SECTION 6 - REACTIVITY DATA

**Reactivity - Stability Data:**

Stable

**Reactivity - Incompatibility:**

No data available.

**Reactivity - Conditions/Hazards to Avoid:**

No data available.

**Reactivity - Hazardous Decomposition/Polymerization:**

Hazardous Decomposition Products: No Data Available.

Polymerization: Does not occur.

**Reactivity - Corrosive Properties:**

Not corrosive.

**Reactivity - Oxidizer Properties:**

Not an oxidizer

## SECTION 7 - PERSONAL PROTECTION

**Personal Protection - Clothing:**

Gloves, coveralls, apron, boots as necessary to minimize contact.

**Personal Protection - Eyes:**

Chemical goggles; also wear a face shield if splashing hazard exists.

Product ID: NVS 583870  
NAPA ANTIFREEZE

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### SECTION 7 - PERSONAL PROTECTION (Cont.)

**Personal Protection - Respiration:**

If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor/mist respirator.

**Personal Protection - Ventilation:**

Use local exhaust to control to recommended P.E.L.

**Personal Protection - Explosion Proofing:**

None required.

### SECTION 8 - SPILL-LEAK/ENVIRONMENTAL

**Spill/Leak Procedures - General:**

Spills should be contained, solidified and placed in suitable containers for disposal in a licensed facility. This material is regulated by CERCLA ("Superfund").

This material is a CERCLA hazardous substance (ethylene glycol having an RQ of 1 lb). Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush area with water.

**Spill/Leak Procedures - Waste Disposal:**

Incinerate or bury in a RCRA licensed facility. Do not discharge into waterways or sewer systems without proper authority.

**Spill/Leak Procedures - Container Disposal:**

Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.

### SECTION 9 - STORAGE AND HANDLING

**Storage and Handling - General:**

No special requirements needed.

Product ID: NVS 583870

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NAPA ANTIFREEZE

**SECTION 10A - FEDERAL REGULATORY INFORMATION**

TSCA Inventory Status  
Listed on Inventory: YES

RCRA Haz. Waste No.:  
CERCLA: YES Reportable Qty.: (If YES) 1 LB

**SECTION 10B - STATE REGULATORY INFORMATION**

State Regulatory Information: (By Component)	NJ/PA/MA RTK
CAS #: 107-21-1 NAME: ETHYLENE GLYCOL	YES
CAS #: 111-46-6 NAME: DIETHYLENE GLYCOL	YES
CAS #: 7758-11-4 NAME: PHOSPHORIC ACID, DIPOTASS	NO

Product ID: NVS 583870  
**NAPA ANTIFREEZE**

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**SECTION 11 - TRANSPORTATION INFORMATION**

**DOT Proper Shipping Name:**

NONE

**DOT Technical Name:**

NONE

**DOT Primary Hazard Class:**

NONE

**DOT Secondary Hazard Class:**

**DOT Label Required:**

NONE

**DOT Placard Required:**

NONE

**DOT Poison Constituent:**

**BASF Commodity Codes:** 332 332      **UN/NA Code:** N/A      **E/R Guide:** N/A

**Bill of Lading Description:**

ANTIFREEZE PREPARATIONS, PROPRIETARY, ETHYLENE GLYCOL BASE

	<b>CLASS:</b>	<b>P. G.</b>	<b>SHIPPING NAME:</b>
<b>IATA:</b>	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE
<b>IMO:</b>	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE
<b>TDG:</b>	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE

Product ID: NVS 583870

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**NAPA ANTIFREEZE****SECTION 12 - MANUFACTURER'S INFORMATION**

- is a registered trademark of **BASF Corporation**.
- ™ is a trademark of **BASF Corporation**.

WHILE BASF CORPORATION BELIEVES THE DATA SET FORTH HEREIN ARE ACCURATE AS THE DATE HEREOF, BASF CORPORATION MAKES NO WARRANTY WITH RESPECT THERETO AND EXPRESSINGLY DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. SUCH DATA ARE OFFERED SOLELY FOR CONSIDERATION, INVESTIGATION, AND VERIFICATION.

**END OF DATA SHEET**



MOTC0090

Revised 28-OCT-1994

Printed 16-NOV-1994

## FLEET HEAVY DUTY MOTOR OIL

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### # Tradenames and Synonyms

Product Codes:

6210/6211/6220/6230/6240/6244/

6245/6250/6260/6261/6265

Grades:

HD 10W, 20W-20, 30, 40, 50;

HD Supreme 10W-30, 15W-40;

10 TBN 15W-40, 30, 40;

LP

#### Company Identification

MANUFACTURER/DISTRIBUTOR

CONOCO INC.

P.O. BOX 2197

HOUSTON, TX 77252

#### PHONE NUMBERS

Product Information 1-713-293-5550

Transport Emergency CHEMTREC 1-800-424-9300

Medical Emergency 1-800-441-3637

### COMPOSITION/INFORMATION ON INGREDIENTS

#### # Components

Material

CAS Number

%

May contain any combination of the following

60-90

base oils:

Solvent Refined Dist., Hvy. Paraffinic 64741-88-4

Solvent Refined Dist., Lt. Paraffinic 64741-89-5

Solvent Dewaxed Dist., Hvy. Paraffinic 64742-65-0

Hydrotreated Dist., Hvy. Paraffinic 64742-54-7

Solvent Refined Residuum 64742-01-4

(Continued)

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**COMPOSITION/INFORMATION ON INGREDIENTS**(Continued)

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Solvent Dewaxed Residual Oil	64742-62-7	
Hydrotreated Bottoms	64742-57-0	
Ethylene/Propylene Copolymer	9010-79-1	0-20
Zinc Compounds	68649-42-3	1-3
Metal Sulfonates		0-11
Proprietary Additives		0-25

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If oil mist is generated, exposure limits apply.

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**HAZARDS IDENTIFICATION****Potential Health Effects****Substance Information**

Primary Routes of Entry: Skin, inhalation

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Manufacturers have not seen allergic reactions to metal sulfonates in workers based on over 40 years of experience. Thus, metal sulfonates would not seem to be a significant health hazard.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

**"USED" Motor Oil -**

There are no epidemiology studies showing "used" motor oil to be carcinogenic. Health hazards to "used" motor oil can be minimized by avoiding prolonged skin contact.

**Carcinogenicity Information**

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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(Continued)

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## FIRST AID MEASURES

### First Aid INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### SKIN CONTACT

Wash thoroughly with soap and water after handling. If irritation develops, consult a physician.

### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

### INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

### Notes to Physicians

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

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## FIRE FIGHTING MEASURES

### Flammable Properties

Flash Point	170 C (338 F) (Minimum)
Method	Pensky-Martens Closed Cup - PMCC.
Autoignition	650 F (343 C)

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NFPA Classification	Class IIIB Combustible Liquid.
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### Extinguishing Media

Water Spray, Foam, Dry Chemical, CO<sub>2</sub>.

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### Fire Fighting Instructions

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

Products of combustion may contain carbon monoxide, carbon dioxide, and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

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## ACCIDENTAL RELEASE MEASURES

### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Remove source of heat, sparks, and flame.

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### Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

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### Spill Clean Up

Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

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## HANDLING AND STORAGE

### # Handling (Personnel)

Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

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### Handling (Physical Aspects)

Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

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### Storage

Store in accordance with National Fire Protection Association recommendations. Store in a well ventilated place. Store in a cool, dry place. Store away from heat, sparks and flames, oxidizers.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

#### VENTILATION

Normal shop ventilation.

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### Personal Protective Equipment

#### RESPIRATORY PROTECTION

None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protective equipment when exposed to sprays or mists. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

#### PROTECTIVE GLOVES

Should be worn when the potential exists for prolonged or repeated skin contact. NBR or neoprene recommended.

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**EXPOSURE CONTROLS/PERSONAL PROTECTION**(Continued)**EYE PROTECTION**

Safety glasses with side shields.

**OTHER PROTECTIVE EQUIPMENT**

Coveralls with long sleeves if splashing is probable.

**OTHER PRECAUTIONS**

Avoid any prolonged or repeated skin contact with "used" motor oil. Wash thoroughly with soap and water after contact.

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**Exposure Guidelines****Applicable Exposure Limits**

If oil mist is generated, exposure limits apply.

PEL (OSHA)	5 mg/m <sup>3</sup> , 8 Hr. TWA
TLV (ACGIH)	5 mg/m <sup>3</sup> , 8 Hr. TWA, STEL 10 mg/m <sup>3</sup> Notice of Intended Changes (1994-1995)
AEL * (Du Pont)	5 mg/m <sup>3</sup> , 8 Hr. TWA, severely refined 5 mg/m <sup>3</sup> , 8 Hr. TWA

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\* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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**PHYSICAL AND CHEMICAL PROPERTIES****Physical Data**

Boiling Point	>520-1200 F (271-649 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Mild Petro. Hydrocarbon
Form	Liquid
Color	Dark Amber to Dark Brown
Specific Gravity	0.873-0.896 @ 60 F (16 C)
Density	7.27-7.47 lb/gal @ 60 F (16 C)

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**STABILITY AND REACTIVITY****Chemical Stability**

Stable at normal temperatures and storage conditions.

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**Conditions to Avoid**

Avoid heat, sparks, and flame.

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**Incompatibility with Other Materials**

Incompatible with strong oxidizing materials.

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**Decomposition**

Combustion forms oxides of carbon and may produce small quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.

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**Polymerization**

Polymerization will not occur.

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(Continued)

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## **TOXICOLOGICAL INFORMATION**

### **Animal Data**

Mouse skin painting studies have shown that highly solvent-refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would not have caused testicular damage.

### **"USED" Motor Oil -**

Laboratory studies with mice have shown that "Used" motor oil applied repeatedly to the skin caused skin cancer. In these studies, the "Used" motor oil was not removed between applications.

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## **ECOLOGICAL INFORMATION**

### **Ecotoxicological Information**

No specific aquatic data available for this product.

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## **DISPOSAL CONSIDERATIONS**

### **Waste Disposal**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

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### **Container Disposal**

Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

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## **TRANSPORTATION INFORMATION**

### **Shipping Information**

DOT  
Not regulated.

ICAO/IMO  
Not restricted.

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(Continued)



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**REGULATORY INFORMATION**(Continued)**State Regulations (U.S.)****CALIFORNIA "PROP 65"**

This material is not known to contain any ingredient(s) subject to the Act.

**PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT**

This material may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient	Zinc Compounds
Category	Environmental Hazard

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**Canadian Regulations**

This is not a WHMIS Controlled Product.

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**OTHER INFORMATION****NFPA, NPCA-HMIS**

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	1
Reactivity	0

Personal Protection rating to be supplied by user depending on use conditions.

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS	MSDS Administrator
Address	Conoco Inc. PO Box 2197 Houston, TX 77252
Telephone	713/293-5550

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# Indicates updated section.

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End of MSDS

# MATERIAL SAFETY DATA SHEET



**Diamond Shamrock**  
Refining and Marketing  
Company

MSDS NUMBER: M7751

MSDS DATE: 06-23-87

PRODUCT NAME: #2 DIESEL FUEL

24 HOUR EMERGENCY PHONE: (512) 641-8800

## I. PRODUCT IDENTIFICATION

2 HEALTH, 2 FLAMMABILITY, 0 REACTIVITY & (Blank) INSTABILITY based on "Standard System for the Identification of the Fire Hazards of Materials, NFPA No. 704, 1985 Edition"

MANUFACTURER'S NAME AND ADDRESS: Diamond Shamrock Refining and Marketing Company, P.O. Box 696000, San Antonio, Texas 78269-6000

CHEMICAL NAME: Light hydrocarbon distillates CAS NUMBER: 68476-34-6

SYNONYMS/Common Names:

CHEMICAL FORMULA: C<sub>5</sub>-C<sub>16</sub> Hydrocarbons

DOT PROPER SHIPPING NAME: Diesel Fuel

DOT HAZARD CLASS: Combustible Liquid

DOT I.D. NUMBER: NA1993

HAZARDOUS SUBSTANCE: NA

## II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	HAZARD DATA	CAS NUMBER	%
Light hydrocarbon Blend	PEL = None established TLV = None established (See Section V)	8008-20-6 64741-44-2 64741-59-9	100

NIOSH has proposed 100mg/m<sup>3</sup> 8hr TWA or ~14ppm 8hr TWA based on an average molecular weight of 170 for kerosene like fractions. The materials in this product are listed in the TSCA Inventory. Not listed as carcinogenic by IARC, NTP, OSHA, ACGIH.

## III. PHYSICAL DATA

BOILING POINT @ 760 mm Hg: 340-670°F VAPOR DENSITY (Air=1): N/A

EVAPORATION RATE (BuAc=1): N/A MELTING POINT: NA

BULK DENSITY AT 20°C: 7.07 lbs/gal % VOLATILES BY VOL.: 100

SOLUBILITY IN H<sub>2</sub>O % BY WT: Trace

SPECIFIC GRAVITY (H<sub>2</sub>O=1) 0.85 API Gravity = 35.0

APPEARANCE AND ODOR: Colorless liquid with aromatic odor; odor threshold ~1ppm and is not an index of exposure

pH: NA

Physical data may vary slightly to meet specifications.

CAS = Chemical Abstract Service Number  
PEL = OSHA Permissible Exposure Limit  
TLV = TLV<sup>®</sup>, ACGIH Threshold Limit Value, Current

N/A = No relevant information found or not available  
NA = Not applicable

This Material Safety Data Sheet was prepared by Diamond Shamrock Refining and Marketing Company on behalf of the above manufacturer in accordance with 29 CFR 1910.1200. All information, recommendations and suggestions appearing herein concerning this product are based upon tests and data believed to be reliable; however, it is the user's responsibility to determine the safety, toxicity and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made by Diamond Shamrock as to the effects of such use. The results to be obtained or the safety and toxicity of the product nor does Diamond Shamrock assume any liability arising out of use by others of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

#### IV. FIRE AND EXPLOSION DATA

FLASH POINT: 150°F AUTOIGNITION TEMPERATURE: N/A  
FLAMMABLE LIMITS IN AIR, % BY VOLUME- UPPER: 5 LOWER: 1  
EXTINGUISHING MEDIA: Dry chemical, foam or carbon dioxide or water spray.  
SPECIAL FIRE FIGHTING PROCEDURES: Pressure-demand, self-contained breathing apparatus should be provided for fire fighters in buildings or confined areas where product is stored.  
UNUSUAL FIRE AND EXPLOSION HAZARD: Clothing, rags, or similar organic material contaminated with the product and stored in a closed space may undergo spontaneous combustion. Transfer product to and from commonly grounded containers.

#### V. HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA: The major effect of exposure to this product is central nervous system depression.  
MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE:  
Conditions which have the same symptoms or effects as stated below.  
MEDICAL LIMITATION: N/A

##### ROUTES OF EXPOSURE

INHALATION: Irritation of the upper respiratory tract with central nervous system stimulation possibly followed by depression, dizziness, headache, incoordination, anesthesia, coma and respiratory arrest.

SKIN CONTACT: Defatting may occur with continued or prolonged contact. Irritation and burning sensation may occur on exposure to liquid vapor phase.

SKIN ABSORPTION: Not significant.

EYE CONTACT: Severe burning sensation with temporary irritation and swelling of lids.

INGESTION: Irritation of mucous membranes of throat, esophagus and stomach which may result in nausea and vomiting; depression may occur if absorbed. (See Inhalation above.)

##### EFFECTS OF OVEREXPOSURE

ACUTE: Central nervous system depression with extreme overexposure; effects may include anesthesia, coma, respiratory arrest, and irregular heart rate. Oxygen deprivation is possible if working in confined spaces.

CHRONIC: Experience has shown no major cumulative or latent effects to have resulted from exposure to this product. (See Health Hazard Data above.)

##### EMERGENCY AND FIRST AID PROCEDURES

EYES: Object is to flush material out then seek medical attention. Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire eye surface. Seek medical attention.

SKIN: Wash contaminated areas with plenty of soap and water. A soothing ointment may be applied to irritated skin after thorough cleansing. Remove contaminated clothing and footwear. Seek medical attention if symptoms result.

INHALATION: Get person out of contaminated area to fresh air. If breathing has stopped, resuscitate and administer oxygen if readily available. SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep airway clear. SEEK MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN: Gastric lavage only if large quantity has been ingested. Guard against aspiration into lungs which may result in chemical Pneumonitis. Irregular heart beat may occur; use of Adrenalin is not advisable. Treat symptomatically.

## VI. REACTIVITY DATA

**CONDITIONS CONTRIBUTING TO INSTABILITY:** Under normal conditions, the material is stable. Avoid sources of ignition such as flames, hot surfaces, electrical or functional sparks, etc.  
**INCOMPATIBILITY:** Avoid contact with strong oxidizers.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products may include carbon monoxide, carbon dioxide and other hydrocarbons.  
**CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:** Material is not known to polymerize.

## VII. ENVIRONMENTAL PROCEDURES

**SPIILLS OR RELEASES:** If material is spilled or released to the atmosphere, steps should be taken to contain liquids and prevent discharges to streams or sewer systems; and control or stop the loss of volatile materials to the atmosphere. Spills or releases should be reported, if required, to the appropriate local, state and federal regulatory agencies.  
**DISPOSAL:** Clean-up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials are regulated and action to handle or dispose of spilled or released materials must meet all applicable local, state and federal rules and regulations. If any question exists, the appropriate agencies should be contacted to assure proper action being taken. Waste product and contaminated material will be considered a hazardous waste if the flash point is less than 140°F requiring disposal at an approved hazardous waste facility.  
**STORAGE:** Protect against physical damage. Outside or detached storage is preferred. Separate from oxidizing materials. Store in cool, well ventilated area of non-combustible construction away from possible sources of ignition.

## VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

**VENTILATION REQUIREMENTS:** Work in well ventilated areas. Special ventilation is not required under normal use. Good engineering controls in high volume uses is required in some localities.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY:** Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respiratory protection following manufacturer's recommendation where spray, mist, or vapor may be generated. Supplied air respiratory protection is required for IDLH areas.

**EYE:** Face shield and goggles or chemical goggles should be worn where mist or spray may be generated.

**GLOVES:** Impervious gloves should be worn during routine handling of this product.

**OTHER CLOTHING AND EQUIPMENT:** Standard work clothing. Shoes contaminated with this product that can not be decontaminated should be discarded. Clothing contaminated with this product should be removed, washed in soap and water and dried before reuse. Contaminated clothing should be stored in well ventilated areas. Shower and eyewash facilities should be accessible.

### MONITORING EXPOSURE

**BIOLOGICAL:** No applicable procedure; breath analysis for hydrocarbons has been suggested.

**PERSONAL/AREA:** Based on similarity to Kerosene, both active and passive monitors employing charcoal absorption followed by gas chromatography. An average molecular weight of 170 has been suggested as the average value to convert the determined weight of hydrocarbons to ppm. Direct reading indicating tubes are available to evaluate short term exposure.



# Material Safety Data Sheet

HD-5 PROPANE FUEL (ODORIZED)

CPS262200

Page 1 of 8

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS.

This is a new Material Safety Data Sheet.

## 1. PRODUCT IDENTIFICATION

HD-5 PROPANE FUEL (ODORIZED)

- DANGER:**
- EXTREMELY FLAMMABLE
  - LIQUID CAN CAUSE EYE AND SKIN INJURY
  - MAY EXCLUDE OXYGEN AVAILABLE FOR BREATHING
  - DETECTION OF LEAK VIA SENSE OF SMELL MAY NOT BE POSSIBLE IF ODORANT HAS DEGRADED. SEE SECTION 6.
  - CONTENTS UNDER PRESSURE
  - KEEP OUT OF REACH OF CHILDREN

PRODUCT NUMBER(S): CPS262200 WPS-300

PRODUCT INFORMATION: (918)560-4134

Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200) by the Chevron Environmental Health Center, Inc., P.O. Box 4054, Richmond, CA 94804.

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## 2. FIRST AID-EMERGENCY PH. (800)457-2022/(510)233-3737 (24 HR)

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### EYE CONTACT:

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. See a doctor for further treatment as soon as possible.

### SKIN CONTACT:

Skin contact with the liquid may result in frostbite and burns. Soak contact area in tepid water to alleviate the immediate effects and get medical attention.

### INHALATION:

If any signs or symptoms as described in this document occur, move the person to fresh air. If any of these effects continue, see a doctor.

### INGESTION:

Not expected to be an ingestion problem, no first aid procedures are required.

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## 3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)

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### EYE CONTACT:

The gas phase is not expected to cause eye irritation. However, the liquid can cause frostbite and burns. This hazard evaluation is based on the data from similar materials.

### SKIN IRRITATION:

The gas is not irritating to the skin. However, skin contact with liquid or solid can cause severe frostbite or burns. This hazard evaluation is based on data from similar materials.

### DERMAL TOXICITY:

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin. This hazard evaluation is based on data from similar materials.

### RESPIRATORY/INHALATION:

This material can act as a simple asphyxiant by displacement of air. Signs and symptoms of the resultant central nervous system effects may include rapid breathing, incoordination, rapid fatigue, excessive salivation, disorientation, headache, nausea and vomiting. Convulsions, loss of consciousness, coma and/or death may occur if exposure to high concentrations continues. Read the Additional Health Data section (12) of this document for more information.

### INGESTION:

Material is a gas and cannot usually be swallowed.

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## 4. PROTECTIVE EQUIPMENT

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### EYE PROTECTION:

Appropriate eye protection must be worn when working with this material or serious harm can result. Wear chemical goggles or a face shield at all

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Revision Number: 0

Revision Date: 04/28/92

MSDS Number: 004919

NDA - No Data Available

NA - Not Applicable

times.

**SKIN PROTECTION:**

Do not get on skin or on clothing. Wear protective clothing including gloves when handling.

**RESPIRATORY PROTECTION:**

No special respiratory protection is normally required.

**VENTILATION:**

Use this material only in well ventilated areas.

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**5. FIRE PROTECTION**

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**FLASH POINT:** (CC) <94F (70C)

**AUTOIGNITION:** 450C (842F)

**FLAMMABILITY LIMITS** (% by volume in air): Lower: 2.1 Upper: 9.5

**EXTINGUISHING MEDIA:**

Stop flow of gas. CO2 for small fires. Water fog.

**NFPA RATINGS:** Health 1; Flammability 4; Reactivity 0; Special NDA; (Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard evaluation of the Chevron Environmental Health Center. Read the entire document and label before using this product.

**FIRE FIGHTING PROCEDURES:**

This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document. Petroleum gases are heavier than air and travel along the ground or into drains to possible distant ignition sources, causing an explosive flashback.

**COMBUSTION PRODUCTS:**

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

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**6. STORAGE, HANDLING, AND REACTIVITY**

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**HAZARDOUS DECOMPOSITION PRODUCTS:**

NDA

**STABILITY:**

Stable.

**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

**INCOMPATIBILITY:**

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Revision Number: 0

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NDA - No Data Available

NA - Not Applicable

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**SPECIAL PRECAUTIONS:**

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed. Before entry into confined spaces that may have contained hazardous material, determine concentrations and take appropriate measures for personal protection. Material presents a hazard that may require personal protective equipment for entry. CONTAINER UNDER PRESSURE. Store away from strong oxidizing materials. Exposure to heat or prolonged exposure to sun may cause container to burst. Do not puncture, incinerate, or store above 120 F.

Special precautions should be taken when entering or handling equipment in this type of gas service because of possible radioactive contamination. All equipment should be checked for radioactivity or opened to the atmosphere and have forced ventilation applied for at least four hours prior to entry or handling. Avoid direct skin contact with any surface. Avoid generation of dust, smoke, fumes, etc. in the work area, or if they cannot be avoided, a tested and certified radionuclide dust respirator should be worn. Smoking, eating, or drinking, should be prohibited when working with the equipment. Employees should wash thoroughly with soap and water and discard contaminated clothing after entering or handling the equipment.

This product has been odorized in order to aid in its detection in case of a leak or accidental discharge. During shipping or storage of an odorized material, alteration of the odorant and subsequent reduction in its effectiveness may occur.

Odorants are reactive. Rust and scale in storage containers and pipes may significantly reduce an odorant's effectiveness. For this reason, storage containers must be free of rust and scale. Whenever an empty cylinder is filled, it must be properly purged and conditioned to remove air and water and to deactivate sites for oxidation of the odorant. Underground pipelines should also be checked periodically for leaks.

Prolonged exposure to an odorant or other strong smells in the environment may reduce an individual's ability to detect the odorant. People with an impaired ability to detect odors due to colds, allergies, smoking, injuries, etc., must be especially cautious.

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## 7. PHYSICAL PROPERTIES

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**SOLUBILITY:** Soluble in alcohol, ether and hydrocarbons; insoluble in water.

**APPEARANCE:** Colorless gas or liquid with distinct odor of commercial natural gas.

**BOILING POINT:** -44F (-42C)

**MELTING POINT:** NA

**EVAPORATION:** NDA

**SPECIFIC GRAVITY:** 0.5 @ 15.6/15.6C.

**VAPOR PRESSURE:** 208 PSI @ 37.8C (Max.).

PERCENT VOLATILE (VOLUME %): 100%  
VAPOR DENSITY (AIR=1): 1.6

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## ~~8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL~~

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CHEMTREC EMERGENCY PH. (800)424-9300/(202)483-7616 (24 hr)

### SPILL/LEAK PRECAUTIONS:

Eliminate all sources of ignition in vicinity of spill or released vapor.

If this material is released into a work area, evacuate the area immediately. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Protective Equipment section.

### DISPOSAL METHODS:

Allow to evaporate with adequate ventilation.

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## 9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

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### COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory. This material is classified as a simple asphyxiant. When working with this material, the minimal oxygen content should be 18 percent by volume under normal atmospheric pressure.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

### PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100.0 % HD-5 PROPANE FUEL (ODORIZED)

#### CONTAINING

> 90.0 % PROPANE  
CAS74986 Asphyxiant ACGIH TLV  
1000ppm OSHA TWA

< 10.0 % ETHANE  
CAS74840 Asphyxiant ACGIH TLV

< 5.0 % PROPYLENE  
CAS115071 A toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.  
ACGIH TLV

< 2.5 % HYDROCARBONS, C4 AND UP  
CAS68476448

RADON

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Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

AND

ODORANT

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	CPS - CUSA Product Code
CC - Chevron Chemical Company	CAS - Chemical Abstract Service Number

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## 10. REGULATORY INFORMATION

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DOT basic descriptions can vary based on package quantity and may not coincide with international description requirements. Consult the Hazardous Materials Regulations in 49CFR and the appropriate Dangerous Goods Regulations to confirm description applicability to specific shipments.

DOT SHIPPING NAME: LIQUEFIED PETROLEUM GAS  
 DOT HAZARD CLASS: FLAMMABLE GAS  
 DOT IDENTIFICATION NUMBER: UN1075

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects; YES
2. Delayed (Chronic) Health Effects; NO
3. Fire Hazard; YES
4. Sudden Release of Pressure Hazard; YES
5. Reactivity Hazard; NO

The following components of this material are found on the regulatory lists indicated by the number below the component name:

PROPYLENE  
 is found on lists: 01,02,10,11,13,14,  
 RADON  
 is found on lists: 06,  
 ETHANE  
 is found on lists: 02,10,11,13,14,  
 PROPANE  
 is found on lists: 02,10,11,13,14,17,

### REGULATORY LISTS SEARCHED:

01=SARA 313	02=MASS RTK	03=NTP Carcinogen
04=CA Prop. 65	05=MI 406	06=IARC Group 1
07=IARC Group 2A	08=IARC Group 2B	09=SARA 302/304
10=PA RTK	11=NJ RTK	12=CERCLA 302.4
13=MN RTK	14=ACGIH TLV	15=ACGIH STEL
16=ACGIH Calculated TLV	17=OSHA TWA	18=OSHA STEL
19=Chevron TLV	20=EPA Carcinogen	21=TSCA Sect 4(e)
22=TSCA Sect 5(a)(e)(f)	23=TSCA Sect 6	24=TSCA Sect 12(b)
25=TSCA Sect 8(a)	26=TSCA Sect 8(d)	28=Canadian WHMIS

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**11. PRODUCT TOXICOLOGY DATA**

**EYE IRRITATION:**

No product toxicology data available. The hazard evaluation was based on data from similar materials.

**SKIN IRRITATION:**

No product toxicology data available. The hazard evaluation was based on data from similar materials.

**DERMAL TOXICITY:**

No product toxicology data available. The hazard evaluation was based on data from similar materials.

**RESPIRATORY/INHALATION:**

No product toxicology data available. The hazard evaluation was based on data from similar materials.

**INGESTION:**

No product toxicology data available. The hazard evaluation was based on data from similar materials.

**12. ADDITIONAL HEALTH DATA**

**ADDITIONAL HEALTH DATA COMMENT:**

This product may contain detectable but varying quantities of the naturally occurring radioactive substance radon 222. The amount in the gas itself is not hazardous, but since radon rapidly decays (t1/2 = 3.82 days) to form other radioactive elements including lead 210, polonium 210, and bismuth 210, equipment may be radioactive. The radon daughters are solids and therefore may attach to dust particles or form films and sludges in equipment. Inhalation, ingestion or skin contact with radon daughters can lead to the deposition of radioactive material in the lungs, bone, blood forming organs, intestinal tract, kidney, and colon. Occupational exposure to radon and radon daughters has been associated with an increased risk of lung cancer in underground uranium miners. Follow the Special Precautions contained in this document.

This product contains butane. An atmospheric concentration of 100,000 ppm (10%) butane is not noticeably irritating to the eyes, nose or respiratory tract, but will produce slight dizziness in a few minutes of exposure. No chronic systemic effect has been reported from occupational exposure.

This product contains isobutane. Isobutane has been shown to increase airway resistance by bronchioconstriction and decrease pulmonary compliance and tidal volume (difficulty in breathing). Air containing 27% isobutane was found to decrease respiratory rate and proved to be fatal to rats.

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Francisco Narroquin  
 Street and Number Star Rt. "A" Llano Grande Road,  
 City Hobbs, TRACT S-31K-1-22 State New Mexico. 88240.  
 Well was drilled under Permit No. L-6759 and is located in the  
1/4 1/4 1/4 of Section 15 Twp. 19-S Rge. 38-E  
 (B) Drilling Contractor Glasspoole W.W. Serv. License No. WD-447  
 Street and Number P.O. Box 52,  
 City Hobbs, State New Mexico. 88240.  
 Drilling was commenced 3-10- 19 71  
 Drilling was completed 3-12- 19 71

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 100 ft.  
 State whether well is shallow or artesian Shallow Depth to water upon completion 45 ft.

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	<u>45</u>	<u>100</u>	<u>55</u>	<u>Water-Sand Brown Soft.</u>
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
<u>6-5/8</u>		<u>Welded</u>	<u>0</u>	<u>100</u>	<u>100</u>	<u>None</u>	<u>80</u>	<u>100</u>

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>8"</u>			

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY  
 Date Received 22 8 61

File No. L-6759 Use Drum Location No. 19-38-15-221

**Appendix C**

**Spill / Leak Contingency Plans**

**SPILL  
RESPONSE / CONTINGENCY  
PLAN**

**prepared for**

**Pate Trucking Company, Inc.**

for the facility located at  
3800 South Eunice Highway  
Hobbs, New Mexico 88240

Prepared by:

**F. Wesley Root**  
3624 West Casa Verde  
Hobbs, New Mexico 88241  
(505) 392-8844

May 21, 1996

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  - A. Notification Procedures**
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  - C. Notification List for the Hobbs Pate Trucking Facility**
  - D. New Mexico Oil Conservation Division Reporting Requirements**
  
- III. Training Procedures**

## **I. Preventive Maintenance**

Normal maintenance for the material storage areas located at the Pate Trucking Facility will be performed by facility employees under the supervision of the appropriate manager. Facility personnel are responsible for maintaining an environmentally-sound site. Minor spills that do not adversely impact the environment will be remediated immediately upon detection. The condition of containers storing chemicals will be evaluated and corrected as needed. The following activities will be performed at a minimum:

### **A. General Maintenance**

1. Hoses, connections and associated equipment will be maintained in good working condition. When not in use, these devices will be stored at the site in a controlled area.
2. All chemicals used during routine maintenance activities will be kept in closed containers when not in use. The containers must be properly labeled, maintained, and stored in their designated area within the shop building when not in use.
3. No chemicals will be stored on exposed soils. All chemical containers (drums etc.) that are temporarily stored pending transport to the job site will be stored on the temporary chemical storage pad. All containers must be closed, properly labeled and maintained.
4. All Pate Trucking personnel are is responsible for maintaining a clean working environment. Spills are to be contained and not released to the environment. The supervisor of each operating shift/crew will inspect and document conditions at the end of each work day.
5. All valves to truck mounted containers must be kept closed at all times when not in use.
6. Remediation of minor spills resulting from normal facility operations which pose no threat to facility employees or the environment will be performed immediately upon detection.
7. Replacement and repair of leaking fittings or valves will be performed as part of normal facility maintenance.

**B. Aboveground Storage Tanks (ASTs)**

1. Perform a weekly visual inspection of the ASTs and secondary containment areas for evidence of leaks/spills. Hoses, valves, and associated equipment will be inspected for corrosion/leaks and maintained in good working condition. The secondary containment liner will be inspected for rips or tears and replaced if necessary.
2. No free-standing liquids will be allowed to collect in the secondary containment area. Should an accumulation of free-standing liquids or a spill/release occur, the personnel discovering the release will notify his first line supervisor.
3. The first line supervisor will notify the Qualified Individual or his designee who will activate the necessary response team personnel to characterize, repair and contain the release.
4. The Qualified Individual or his designee will notify all appropriate federal, state, and local agencies of the release. The Qualified Individual will further contact outside contractors as needed and coordinate all required or directed spill response activities.
5. Once contained, under no circumstances will the release be remediated prior to:
  - a. Waste characterization either by process knowledge or RCRA laboratory analysis has been performed.
  - b. Approval of a work plan describing the clean-up activities has been received from the appropriate regulatory agency or agencies.

**C. Fish Pond**

1. Perform a weekly visual inspection of the earthen berm surrounding the pond. Inspect the berm for integrity and maintain the berm at a minimum height of two feet above ground surface to ensure no surface water runoff or spills can enter the impoundment.
2. Perform a weekly visual inspection of the surface water of the pond for evidence of a hydrocarbon sheen, dead fish, stressed vegetation, or other signs of adverse environmental impact.
3. Should evidence of adverse environmental impact be identified or the pond becomes contaminated by a spill/release, the personnel discovering the release will notify his first line supervisor.

4. The first line supervisor will notify the Qualified Individual or his designee who will activate the necessary response team personnel to characterize, and contain the extent of impact.
5. The Qualified Individual or his designee will notify all appropriate federal, state, and local agencies of the contamination. The Qualified Individual will further contact outside contractors as needed and coordinate all required or directed spill response activities.
6. Once contained, under no circumstances will the release be remediated prior to:
  - a. Waste characterization either by process knowledge or RCRA laboratory analysis has been performed.
  - b. Approval of a work plan describing the clean-up activities has been received from the appropriate regulatory agency or agencies.

**D. Below Grade Sump**

1. The primary purpose of the below grade sump in the maintenance building is to provide access to the underside of trucks and other wheel mounted equipment. No motor oils, antifreeze, solvents, or other liquids are to be allowed to collect in the sump. All fluids used and any wastes generated during maintenance activities will be kept stored in containers supplied for that purpose.
2. Perform a weekly visual inspection of the sump for integrity, free standing liquids, sludge, or evidence of a chemical release into the sump.
3. Should evidence of adverse environmental impact be identified or an accumulation of liquids/sludge collect in the sump, the personnel discovering the release will notify his first line supervisor.
4. The first line supervisor will notify the Qualified Individual or his designee who will arrange for RCRA Profile analysis and disposal in accordance with New Mexico Oil Conservation Division regulations.

## II. Pollution Incidents

The facility shall maintain a record of pollution incidents. The record will include the data and nature of the incident, internal/external notifications made (including follow-up written reports), and actions taken to correct the problem. The records will be kept on file at the facility.

### A. Notification Procedures

Pate Trucking will provide the name and telephone number of the qualified individual to contact in the event of a spill/leak that could potentially have an adverse impact to the environment and describe a communication network of response telephone lists to identify those parties (i.e. federal, state, and local officials, contractors, and personnel) who must be immediately contacted in the event of a discharge into the environment.

The qualified individual is an English speaking representative of Pate Trucking, available on a 24-hour basis, with full authority to activate and contract with required spill removal organizations, activate personnel and equipment as needed, act as the company liaison with regulatory authorities, and obligate any funds required to carry out all required or directed response activities.

Qualified Individual: Mr. Gary Reid	Office 505-397-6264
General Manager	Mobile 505-397-9536
	Home 505-393-4866

### B. Checklist of Notifications

This Checklist of Notifications is listed in order of priority for the qualified individual to follow and thus establish a communication network. The Qualified Individual or responsible employee will make a determination of the severity of the release event and decide the appropriate civil authorities, businesses, and regulatory agencies to notify. Our first responsibility is to protect personnel, then property and the environment.

1. Notify Company Supervisor/Qualified Individual
2. Notify Civil Authorities
3. Notify other effected businesses (pipelines, utilities, etc.)
4. Notify Regulatory Agencies (State & Federal)

**C. Notification List for the Hobbs Pate Trucking Facility**

**Civil Authorities**

- |    |                                      |              |
|----|--------------------------------------|--------------|
| 1. | New Mexico Highway Patrol Department | 505-392-5588 |
| 2. | Sheriff                              | 911          |
| 3. | Hospital                             | 911          |
| 4. | Fire Department                      | 911          |
| 5. | Hobbs Water Utilities                | 505-397-9314 |
| 6. | Hobbs Gas Company                    | 505-393-5105 |

**Regulatory Agencies**

- |    |   |                              |
|----|---|------------------------------|
| 1. | New Mexico Oil Conservation Division<br>Environmental Engineer <u>Wayne Price</u> | 505-393-6161                 |
| 2. | New Mexico Environmental Department   | 505-827-9392                 |
| 3. | EPA Region 6<br>On-Scene-Coordinator (OSC) <u>Don Smith</u>                       | 214-655-6489                 |
| 4. | Department of Transportation (DOT)  | 800-424-8802                 |
| 5. | National Response Center  | 800-424-8802<br>202-267-2675 |

**D. New Mexico Oil Conservation Division Reporting Requirements**

In addition to the above listed notifications, the Pate Trucking Facility is subject to notification and reporting requirements of the New Mexico Oil Conservation Division.

Report all fires, breaks, leaks, or spills to:

1. New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division, Environmental Section  
Santa Fe, New Mexico 87504-2088  
505-827-5800
2. New Mexico Oil Conservation Division  
District I  
Hobbs, New Mexico  
505 393-6161

The above should be notified as soon as possible after discovering the incident by telephone or in person. A written report of the incident (in duplicate) must be forwarded to the Hobbs District I Office within 10 days of the discovery of the incident.

All verbal and written reports shall include:

1. Location of the incident by quarter, quarter of section, township, and range.  
The Pate Trucking Facility is located in the
2. The distance and direction from the nearest town or prominent landmark so that the exact location of the incident can be readily located on the ground.
3. A description of the nature and quantity of the loss.
4. The general conditions at the site to include precipitation, temperature, and soil conditions.
5. A description of the actions that have been and/or being performed to remedy the situation.

### **III. Training Procedures**

All Pate Trucking Company employees are required to complete supervised training and have a thorough knowledge of the Spill Response / Contingency Plan. Training includes job safety analysis, hazardous communication, and hazardous material training. Ongoing training includes classes related to the employee's job and monthly safety meetings that cover topics listed in the published yearly training program. It is the company policy for supervisors as well as employees to undergo these training programs. Through yearly evaluations, the company reviews the work performed by operating personnel and determines the effectiveness of the training program. Periodically, appropriate changes are made in the training program to correct deficiencies and improve employee performance. Records of training are located in the Pate Trucking Company Office.

**Appendix D**  
**Water Well Records**

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well FRANCISCO WARBORGUIS  
 Street and Number Barro Grande Road Route A  
 City HOBBS State NM  
 Well was drilled under Permit No. L-6858 and is located in the  
1/4 SW 1/4 NE 1/4 of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor J. G. Baston License No. W.D. 14  
 Street and Number Box 42  
 City Hobbs State NM  
 Drilling was commenced Mar 29 1971  
 Drilling was completed Dec 6 1971

(Plat of 640 acres)

Elevation at top of casing in feet above sea level - Total depth of well 100  
 State whether well is shallow or artesian Shallow Depth to water upon completion 45'

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	45	65	20	Soft Brown Sand
2	90	100	10	Soft Brown Sand
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	-	welded	0	100	100	None	70	100

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7			

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 71  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

Basin Supervisor \_\_\_\_\_

**FOR USE OF STATE ENGINEER ONLY**

Date Received DEC 13 1971

File No. L-6858 Use Dom. Location No. 19-38.15-230

No.	Depth of Plug		No. of Sacks Used
	From	To	

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Bobby Townsend Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 321 West Palace  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7357 and is located in the:  
a. 1/4 1/4 SE 1/4 SE 1/4 of Section 15 Township 19S Range 38E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. Lea of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46  
Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 4/11/75 Completed 4/12/75 Type tools Cable Size of hole 8 in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 101 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
47	101	54		

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	101	101	None	60	101

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top.

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_ Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-7357 Use Down Location No. 19.38.15.2422.1

1535

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well G. D. Lee Owner's Well No. 80090-1  
Street or Post Office Address Star Rt, A Box 26  
City and State Hobbs, New Mexico, 88240

Well was drilled under Permit No. L-8046 and is located in the:

- a. SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Gade Oldaker License No. WD-657

Address P. O. Box 2321, Hobbs, New Mexico, 88240

Drilling Began 3/20/80 Completed 3/20/80 Type tools rotary Size of hole 10 $\frac{1}{2}$  in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 130 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 58 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
58	130	72	Water, Sand	25 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	130	130	none	110	130

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		10 $\frac{1}{2}$			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received May 7, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8046 Use DOM Location No. 19.38.15.244

STATE ENGINEER OF THE  
WELL RECORD

*Handwritten notes*

Section 1. GENERAL INFORMATION

(A) Owner of well Wilbur Sherrill Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address 1101 South Dal Paso  
 City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7359 and is located in the:

- a.  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 4/10/75 Completed 4/11/75 Type tools Cable Size of hole 8 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 117 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 57 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
57	117	60		

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	117	117	NONE	77	117

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top.

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_ Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-7359 Use Dom Location No. 19.38.15.24444

# WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

### Section 1


(A) Owner of well T. M. Dean  
 Street and Number 623 South Linam St.  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-2667 and is located in the  
1/4 S 1/4 1/4 SE 1/4 of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor O. R. Mussalawhite License No. WD99  
 Street and Number Box 56  
 City Hobbs State New Mexico  
 Drilling was commenced Feb. 21 1957  
 Drilling was completed Feb. 22 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 106  
 State whether well is shallow or artesian Shallow Depth to water upon completion 70

### Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	60	105	25	Red sand & sand rock
2				
3				
4				
5				

### Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	20	None	0	10	10	None	None	

### Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

### Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

Basin Supervisor \_\_\_\_\_

**FOR USE OF STATE ENGINEER ONLY**

Date Received MAY 17 1957

OFFICE OF THE STATE ENGINEER  
 DISTRICT WATER SUPERVISOR  
 DISTRICT NO. 10

No.	Depth of Plug		No. of Sacks Used
	From	To	

File No. L-2667 Use Dem. Location No. 19.38.12.400

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well C.C. BONNER Owner's Well No. 62298  
 Street or Post Office Address 4 LAND GRANDE Rd.  
 City and State Hobbs N.M.

Well was drilled under Permit No. L-7512 and is located in the:  
 a.  $\frac{1}{4}$   $\frac{1}{4}$  N/2  $\frac{1}{4}$  SE/4 of Section 15 Township 19 S Range 30 E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in LEA County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD 657  
 Address P.O. Box 2321 Hobbs N.M.  
 Drilling Began 4-12-76 Completed 4-14-76 Type tools Cable Size of hole 8 in.  
 Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	Water, SAND	25 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 <sup>3</sup> / <sub>8</sub>			0	100	100	NONE	85	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		8			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

Date Received April 26, 1976 FOR USE OF STATE ENGINEER ONLY

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. 1410302

STATE ENGINEER OFFICE  
WELL RECORD

FIELD OFFICE LOS

Section 1. GENERAL INFORMATION

(A) Owner of well Gerald W. Weldy Owner's Well No. 72825 1  
Street or Post Office Address 22 Llano Grande Rd.  
City and State Hobbs, N. M. 88240

Well was drilled under Permit No. L-7882 and is located in the:  
a.  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE of Section 15 Township 19 S Range 38E N.M.P.M.  
b. Tract No. 8 of Map No. \_\_\_\_\_ of the Llano Grande Sub.  
c. Lot No. \_\_\_\_\_ of Block No. 1 of the Llano Grande  
Subdivision, recorded in Lea County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor G. D. Oldaker License No. WD-657  
Address P. O. Box 2321, Hobbs, N. M. 88240  
Drilling Began 4-18-79 Completed 4-19-79 Type tools Cable Size of hole 9 in.  
Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	Water and Sand	25 G P M

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	100	100	none	85	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		9			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

STATE ENGINEER OF  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Frank Glasspoole Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Star Rt. "A" 628 Llano Grande  
 City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-6101 and is located in the:

- a. \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ N½ ¼ SE ¼ of Section 15 Township 19 Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD- 657

Address P.O. Box 2321, Hobbs, N.M. 88240

Drilling Began 12-20-85 Completed 12-22-85 Type tools Roary Size of hole 7 in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 38 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
38	100	62	Water, Sand	25G PM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
65/8			0	100	100	none	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		7			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received April 13, 1987

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-6101 Use DOMESTIC Location No. 19.38.15.41131

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(Plat of 640 acres)

(A) Owner of well J. O. Clark  
 Street and Number Box 758  
 City Hobbs State N.M.  
 Well was drilled under Permit No. 1-4489 and is located in the  
SW 1/4 NW 1/4 SE 1/4 of Section 15 Twp. 195 Rge. 38E  
 (B) Drilling Contractor J. E. Barton License No. WD14  
 Street and Number 920 E. Gypsy Box 42  
 City Hobbs State N.M.  
 Drilling was commenced 8-24-60 19  
 Drilling was completed 8-28-60 19

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 100  
 State whether well is shallow or artesian shallow Depth to water upon completion 41'

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	41'	50'	9'	Sand Rock (Porous)
2	50	100	50	Water Sand
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
5"	plastic		0	100				

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7"			

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE

Date Received \_\_\_\_\_

2:08 PM SEP - 1 1960

File No. 1-4489 Use Dom. Location No. 19-38-15-413

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well James Fulherson Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 125 E. Liano Grande  
City and State Hobbs, NM 88240

Well was drilled under Permit No. L-10,046 and is located in the:  
a.  $\frac{1}{4}$   $\frac{1}{4}$  N1/2 SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Larry's Drilling License No. WD882  
Address 2116 W. Bender, Hobbs, NM88240

Drilling Began 11-18-88 Completed 11-26-88 Type tools Button Size of hole 83/4 in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 70 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
70	120	50	sand & sandstone	30

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 1/2	160PVC		-1	120	121		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received December 5, 1988

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-10,046 Use DOMESTIC Location No. 19.38.15.4130

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Benny Boddy Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address 307 932  
 City and State Plains, NM

Well was drilled under Permit No. L-9821 and is located in the:  
 a. \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ N ¼ SE ¼ of Section 15 Township 19-S Range 38-E N.M.P.M.  
 b. Tract No. 7 of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. 1 of the LLANO GRANDE  
 Subdivision, recorded in 122 County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor C.M. Griffin License No. WD 603  
 Address 201 W AITO Hobbs, N.M 88240  
 Drilling Began 5/2/86 Completed 5/3/86 Type tools Rotary Size of hole 7 1/2 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 51 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
<u>50</u>	<u>100</u>	<u>50</u>	<u>Red Sand</u>	<u>100</u>

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>5</u>			<u>0</u>	<u>100</u>	<u>100</u>	<u>None</u>	<u>80</u>	<u>100</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
<u>0</u>	<u>100</u>	<u>7 1/2</u>	<u>1</u>		<u>Sel w/ water</u>

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received May 12, 1986 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-9821 Use DOMESTIC Location No. 19.38.15.41340

**WELL RECORD**

Section 1. GENERAL INFORMATION

(A) Owner of well James P. Collins Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address \_\_\_\_\_  
 City and State Robbs, N.M.

Well was drilled under Permit No. L-9018 and is located in the:  
 a. \_\_\_\_\_  $\frac{1}{4}$  Sec. \_\_\_\_\_  $\frac{1}{4}$  N. \_\_\_\_\_  $\frac{1}{4}$  E. \_\_\_\_\_ of Section 19 Township 19 Range 5 N.M.P.M.  
 b. Tract No. 5 of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. 2 of the Llano Grande  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Clair & Sons License No. 80-627  
 Address P.O. Box 2321, Robbs, N.M.  
 Drilling Began 8-2-82 Completed 9-3-82 Type tools Cable Size of hole 10 1/2 in.  
 Elevation of land surface or \_\_\_\_\_ 3050 at well is 3050 ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	Water sand	25

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 1/2			0	100	100	None	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		10 1/2			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 \_\_\_\_\_ State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received October 31, 1983 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-9018 Use DOMESTIC Location No. 19.38.15.414

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well HAZEL K. DOBBINS Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address # 15 LLANO GRANDE  
 City and State HOBBS, N.M. 88240

Well was drilled under Permit No. L-9310 and is located in the:

- a. \_\_\_\_\_ ¼ SE ¼ NW ¼ SE ¼ of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. PT. 5 & 6 Block No. 2 of the LLANO GRANDE  
 Subdivision, recorded in LEA County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor GENE EADES License No. WD982

Address RT. 4 TAHOKA, TX. 79373

Drilling Began 8-29-83 Completed 8-29-83 Type tools Rotary Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 58 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
<u>58</u>	<u>120</u>	<u>62</u>	<u>WATER SAND</u>	<u>35</u>

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>5 3/4</u>	<u>160 psi</u>				<u>120</u>		<u>110</u>	<u>120</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

FOR USE OF STATE ENGINEER ONLY

Date Received September 1, 1983 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-9310 Use DOMESTIC Location No. 19, 38, 15, 414

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well B.R. Dobbins Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P.O. Box 1825  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7381 and is located in the:

- a.  $\frac{1}{4}$   $\frac{1}{4}$  N $\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. 6 of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. 2 of the Llano Grande  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 5/15/75 Completed 5/16/75 Type tools Cable Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 100 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 50 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
50	100	50	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	12	Welded	0	100	100	None	80	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

Date Received Dec 3, 1976 FOR USE OF STATE ENGINEER ONLY

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. 2-5337 Use Danner + STK Location No. 19, 38, 15, 41/12

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Neri Attaway  
 Street and Number Star Route A Box 13-B  
 City Hobbs New Mexico State \_\_\_\_\_  
 Well was drilled under Permit No. L-5013 and is located in the  
1/4 NE 1/4 SE 1/4 of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor J. P. Barton License No. VT-14  
 Street and Number Box 42  
 City H State New Mexico  
 Drilling was commenced April 9 1963  
 Drilling was completed April 10 1963

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 1008-- 100'  
 State whether well is shallow or artesian shallow Depth to water upon completion 47'

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	53	61	8'	
2	86	91	5'	
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor PLOMB License No. \_\_\_\_\_  
 Street and Number 2 City MARCEL State \_\_\_\_\_  
 Tons of Clay used 80 Tons of Roughage used 52 Type of roughage \_\_\_\_\_  
 Plugging method used PT Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: 8 Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_  
**FOR USE OF STATE ENGINEER ONLY**  
 Date Received APR 30 AM 8:10 1963

File No. L-5013 Use Don Location No. 19.38.15.420

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Mrs. R.W. Scott Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P.O. Box 974  
City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-9896 and is located in the:  
a.  $\frac{1}{4}$   $\frac{1}{4}$  N $\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD-657  
Address P.O. Box 2321, Hobbs, N.M. 88240

Drilling Began 2-15-87 Completed 2-17-87 Type tools Rotary Size of hole 7 in.  
Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 38 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
38	100	62	Water Sand	25 G P M

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5			0	100	100	none	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		7			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received February 29, 1988 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-9896 Use DOM Location No. 19.38.15.42124

FIELD LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(A) Owner of well Wayne Dallew

Table with 4 columns and 4 rows, likely for plat information.

Street and Number \_\_\_\_\_

City Hobbs State New Mexico

Well was drilled under Permit No. L-4107 and is located in the

1/4 1/4 1/4 of Section \_\_\_\_\_ Twp. \_\_\_\_\_ Rge. \_\_\_\_\_

(B) Drilling Contractor Ed Burke License No. WD 111

Street and Number Box 306

City Hobbs State New Mexico

Drilling was commenced April 23 19 59

Drilling was completed April 23 19 59

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 112

State whether well is shallow or artesian shallow Depth to water upon completion 60

Section 2

PRINCIPAL WATER-BEARING STRATA

Table with 5 columns: No., Depth in Feet (From, To), Thickness in Feet, Description of Water-Bearing Formation. Row 1: 1, 60, 122, 62, water sand.

Section 3

RECORD OF CASING

Table with 9 columns: Dia in., Pounds ft., Threads in., Depth (Top, Bottom), Feet, Type Shoe, Perforations (From, To). Row 1: 7, 24, 10, 0, 112, 112, Plain, 78, 112.

Section 4

RECORD OF MUDDING AND CEMENTING

Table with 6 columns: Depth in Feet (From, To), Diameter Hole in in., Tons Clay, No. Sacks of Cement, Methods Used.

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_

Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_

Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

Table with 3 columns: No., Depth of Plug (From, To), No. of Sacks Used.

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

MAY 7 - 1959

OFFICE SUPERVISOR

File No. L-4107

Use Dallew

Location No. 19.38.15.422

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Table with 4 columns and 3 rows, likely for recording well location or survey data.

(A) Owner of well J K Barton
Street and Number 920 East Gypsy
City Hobbs State N M.
Well was drilled under Permit No. L-4622 and is located in the
ne 1/4 ne 1/4 sec 15 Twp 19s Rge. 38s
(B) Drilling Contractor J K Barton License No. WD14
Street and Number 920 E Gypsy
City Hobbs State N M.
Drilling was commenced June-1 19 61
Drilling was completed June-1 19 61

(Plat of 640 acres)

Elevation at top of casing in feet above sea level Total depth of well 70 feet
State whether well is shallow or artesian shallow Depth to water upon completion 46

Section 2 PRINCIPAL WATER-BEARING STRATA

Table with 4 columns: No., Depth in Feet (From, To), Thickness in Feet, Description of Water-Bearing Formation. Row 1: 1, 46, 70, 24, watersand and loose rock.

Section 3 RECORD OF CASING 7 inch curb. 4 feet.

Table with 7 columns: Dia in., Pounds ft., Threads in., Depth (Top, Bottom), Feet, Type Shoe, Perforations (From, To).

Section 4 RECORD OF MUDDING AND CEMENTING

Table with 5 columns: Depth in Feet (From, To), Diameter Hole in in., Tons Clay, No. Sacks of Cement, Methods Used.

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.
Street and Number City State
Tons of Clay used Tons of Roughage used Type of roughage
Plugging method used Date Plugged 19

Plugging approved by:

Cement Plugs were placed as follows:

Basin Supervisor
FOR USE OF STATE ENGINEER ONLY
STATE ENGINEER OFFICE
Date Received AUG 15 AM 8:28 1961

Table with 3 columns: No., Depth of Plug (From, To), No. of Sacks Used.

File No. L-4622 Use Dam Location No. 19.38.15.422

STATE ENGINEER OF THE  
WELL RECORD

FILED IN 112

Section 1. GENERAL INFORMATION

(A) Owner of well Terry Morrow Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P. O. Box 2096  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7379 and is located in the:

- a.  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. 8 of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. 3 of Block No. 2 of the Llano Grande Subdivision, recorded in Lea County. Thence S 8°10' W 416 ft., thence S 89°57' E 104 ft., thence N 0°10' E 416 ft., thence N 89°57' W 104 ft.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System to point of Beg. Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor C. M. Griffin License No. WD-603  
Address P. O. Box 2096, Hobbs, New Mexico 88240  
Drilling Began 5/26/75 Completed 5/31/75 Type tools Spudder Size of hole 8 in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 44 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
49	120	71	Red sand with sand rock stringers	25

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	120	120		90	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
38	120	8	6		Gel mixed with water

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_ Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. 2-7379 Use Don Location No. 19.38.15.42312

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Tommy Phar  
 Street and Number 813 East Marland  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-4539 and is located in the  
se 1/4 ne 1/4 se 1/4 of Section 15 Twp. 10 Rge. 38  
 (B) Drilling Contractor J E Barton License No. WD14  
 Street and Number Box 42  
 City hobbs State N.M.  
 Drilling was commenced Nov 4 1960  
 Drilling was completed Nov 5 1960

(Flat of 840 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 100 feet  
 State whether well is shallow or artesian Shallow Depth to water upon completion 48 feet

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	0	2	2	dark soil
2				
3	48	65	17	watersand
4	90	100	10	watersand
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7			0	8	8		For Curb	

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE

Date Received 1960 NOV 29 AM 8:27

File No. L-4539

Use Sam & Stack Location No. 19.38.15 424

WELL RECORD

FIELD ENGR. LOG

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well HARLIN & HOUSTON, INC.  
 Street and Number BOX 102  
 City HOBBS, N.M. L-6733 State \_\_\_\_\_  
 Well was drilled under Permit No. L-6733(2) and is located in the  
SE 1/4 NE 1/4 SE 1/4 of Section 15 Twp. 19 Rge. 38  
 (B) Drilling Contractor ABBOTT BROS. License No. 46  
 Street and Number BOX 637  
 City HOBBS, N.M. State \_\_\_\_\_  
 Drilling was commenced NOV. 15, 1970 19\_\_\_\_  
 Drilling was completed NOV. 16, 1970 19\_\_\_\_

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 123'  
 State whether well is shallow or artesian \_\_\_\_\_ Depth to water upon completion 50

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	40	123	83	water sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7	23	8	1	123	123	none	50	123

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

**FOR USE OF STATE ENGINEER ONLY**

Date Received \_\_\_\_\_

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Jim Spradley Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P.O. Box 2187  
City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-10,322 and is located in the:

- a.  $\frac{1}{4}$  SE  $\frac{1}{4}$  <sup>NE $\frac{1}{4}$</sup>  ~~NW~~  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 17 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Alan Eades License No. WD-1044  
Address 1200 E. Bender, Hobbs, N.M. 88240  
Drilling Began 4-13-93 Completed 4-13-93 Type tools Rotary Size of hole 8 in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 133 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 44 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
44	133	89	Sand & Sandstone Stringers sandstone, Sand & Gravel	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 3/4	160psi				133		113	133

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received May 7, 1993 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-10,322 Use D & S Location No. 19.38.15.42424

1 < N

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Harrison, Harrison  
 Street and Number \_\_\_\_\_  
 City \_\_\_\_\_ State Ill Ill  
 Well was drilled under Permit No. 5623 and is located in the  
SE 1/4 NE 1/4 SE 1/4 of Section 15 Twp. 19 Rge. 38 E  
 (B) Drilling Contractor JE BARTON License No. WD14  
 Street and Number Box 4  
 City Holtz State Ill Ill  
 Drilling was commenced 6-1- 1964  
 Drilling was completed 6-1- 1964

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 142  
 State whether well is shallow or artesian Shallow Depth to water upon completion 52

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	52	68	16	water sand
2	90	105	15	water sand
3	132	138	6	water sand
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
6 3/4	11	Welded	0	142	142	None	100	142

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_  
 FOR USE OF STATE ENGINEER ONLY  
 STATE ENGINEER OFFICE  
 Date Received 52-8-AM 61 JUL 19 1964  
 File No. L-5623 Use Comm. Location No. 19.38.15.424

# WELL RECORD

Date of Receipt December 27, 1954 Permit No. L-2689

Name of permittee, M. L. Bingham

Street or P. O. 1207 East Park City and State Hobbs New Mexico

1. Well location and description: The shallow well is located in se  $\frac{1}{4}$ , se  $\frac{1}{4}$ ,  
(shallow or Artesian)  
se  $\frac{1}{4}$  of Section 15, Township 19s, Range 38e; Elevation of top of  
casing above sea level, \_\_\_\_\_ feet; diameter of hole, 6 inches; total depth, 83 feet;  
depth to water upon completion, 49 feet; drilling was commenced 11-29, 1954  
and completed 11-30, 1954; name of drilling contractor J. L. Barton  
; Address Box 42 Hobbs N.M.; Driller's License No. WD14

### 2. Principal Water-bearing Strata:

No.	Depth in Feet		Thickness	Description of Water-bearing Formation
	From	To		
No. 1	<u>49</u>	<u>60</u>	<u>11</u>	<u>light brown watersand</u>
No. 2	<u>68</u>	<u>83</u>	<u>15</u>	<u>brown water sand</u>
No. 3				
No. 4				
No. 5				

### 3. Casing Record

No.	Diameter in inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner		Type of Shoe	Perforation	
				Bottom	Top		From	To
<u>7</u>				<u>0</u>	<u>5</u>	<u>5</u>		<u>for purpose of curb</u>

4. If above construction replaces old well to be abandoned, give location: \_\_\_\_\_  $\frac{1}{4}$ , \_\_\_\_\_  $\frac{1}{4}$ , \_\_\_\_\_  $\frac{1}{4}$   
of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_; name and address of plugging contractor,  
\_\_\_\_\_

date of plugging \_\_\_\_\_, 19\_\_\_\_; describe how well was plugged: \_\_\_\_\_

**FILED**  
**DEC 27 1954**  
OFFICE  
GROUND WATER SUPERVISOR  
ROOSEVELT, NEW MEXICO

✓

**WELL RECORD**

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well N. L. Bligham  
 Street and Number Star route A.  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-3248 and is located in the  
no 1/4 se 1/4 se 1/4 of Section 15 Twp. 19a Rge. 38a  
 (B) Drilling Contractor J. F. Barton License No. ED14  
 Street and Number Box 42  
 City Hobbs State N.M.  
 Drilling was commenced Apr-26- 1958  
 Drilling was completed Apr-26- 1958

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 123 feet  
 State whether well is shallow or artesian shallow Depth to water upon completion 43 feet

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	43	60	12	water sand
2	61	90	9	water sand
3	105	114	9	water sand
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
14		none	0	123	123	none	56	120

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor  
**FOR USE OF STATE ENGINEER ONLY**  
 Date Received MAY 8 1958  
 OFFICE  
 GROUND WATER SUPERVISOR  
 ROSWELL, NEW MEXICO

File No. L 3248 Use Dr. Location No. 19.38 15.442

STATE ENGINEER OFFICE  
WELL RECORD

RISER LOG

Section 1. GENERAL INFORMATION

(A) Owner of well A.A. Aaron Owner's Well No. \_\_\_\_\_  
Street or Post Office Address Star Route 8, Box 70  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-8352 and is located in the:

- a. \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ SE ¼ SE ¼ of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 9/16/80 Completed 9/17/80 Type tools Cable Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 118 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 50 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	118	58	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	19	Welded	0	118	118	None	78	118

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received September 19, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8352 Use DOM. Location No. 19.38.15.44

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Joe Tarbet Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Rt. 4, Box 333A  
 City and State Seminole, Texas 79360

Well was drilled under Permit No. L-10, 138 and is located in the:  
 a. \_\_\_\_\_  $\frac{1}{4}$  \_\_\_\_\_  $\frac{1}{4}$  S $\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 14 Township 19-S Range 38E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began Dec. 9, 1990 Completed Dec. 15, 1990 Type tools Cable Tool Size of hole 16 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 170 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	166	106	Sand & etc	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
14	37	Welded	0	171	171	NONE	91	171

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 19, 1991 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-10,138 Use IRR Location No. 19.38.14.44333  
19.38.14.44333

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Walter W. Krug DBA Wallen Productions Owner's Well No. \_\_\_\_\_  
Street or Post Office Address Box 1960  
City and State Midland, Texas 79702

Well was drilled under Permit No. L-8250 and is located in the:

- a. NE ¼ SE ¼ SW ¼ of Section 14 Township 19-S Range 38-E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208  
Address P. O. Box 74 Oil Center, New Mexico 88266

Drilling Began Jan 10, 1980 Completed Jan 12, 1980 Tools Spudder Size of hole 10 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 125 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 80 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
95	120	25	<del>water</del> Sand.	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	welded		0	125	125	none	105	121

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received April 21, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8250 Use OWD Location No. 19.38.14. 34244

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Neurgen Construction Company  
 Street and Number Box 545  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-3658 and is located in the  
1/4 N W 1/4 S W 1/4 of Section 31 Twp. 19 S Rge. 3E E  
 (B) Drilling Contractor C. E. Musslowwhite License No. WD 99  
 Street and Number Box 56  
 City Hobbs State New Mexico  
 Drilling was commenced August 26 1957  
 Drilling was completed August 28 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 120  
 State whether well is shallow or artesian shallow Depth to water upon completion 50

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	85	120	35	Rod band
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
5 1/2	12	none	0	120	120	none	70	120

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

**FILED**

FOR USE OF STATE ENGINEER ONLY

SEP 3 1957

OFFICE  
 GROUND WATER SUPERVISOR  
 BOSWELL, NEW MEXICO

Date Received \_\_\_\_\_

File No. L-3658 Use Dom Location No. 19 38.14.310

# WELL RECORD

Date of Receipt \_\_\_\_\_ Permit No. L-1021  
& Enlarged

Name of permittee, J. A. Selman

Street or P. O. Star Route B City and State Hobbs, New Mexico

1. Well location and description: The Shallow well is located in NW 5/8 NE SE 1/4,  
(shallow or artesian) (NMPM)

NE 1/4 of Section 14, Township 19S, Range 38E; Elevation of top of

casing above sea level, \_\_\_\_\_ feet; diameter of hole, 16 inches; total depth, 125 feet;

depth to water upon completion, 95 feet; drilling was commenced April 10, 1953

and completed April 13, 1953; name of drilling contractor O. R. Hudlowwhite

Box 56; Address, Hobbs, New Mexico; Driller's License No. WJ 99

### 2. Principal Water-bearing Strata:

	Depth in Feet		Thickness	Description of Water-bearing Formation
	From	To		
No. 1	<u>65</u>	<u>85</u>	<u>20</u>	<u>Red Sand Fine</u>
No. 2	<u>88</u>	<u>125</u>	<u>37</u>	<u>Red Sand Course</u>
No. 3				
No. 4				
No. 5				

### 3. Casing Record:

Diameter in inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner		Feet of Casing	Type of Shoe	Perforation	
			Top	Bottom			From	To
<u>16</u>	<u>30</u>	<u>None</u>	<u>0</u>	<u>3</u>	<u>3</u>			

4. If above construction replaces old well to be abandoned, give location: \_\_\_\_\_ 1/4, \_\_\_\_\_ 1/4, \_\_\_\_\_ 1/4

of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_; name and address of plugging contractor,

date of plugging \_\_\_\_\_, 19\_\_\_\_; describe how well was plugged: \_\_\_\_\_

FILED  
APR 20 1953

Handwritten mark

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

Grid for well location details (Plat of 640 acres)

(A) Owner of well James A. Selman
Street and Number Star Route A.
City Hobbs, State New Mexico
Well was drilled under Permit No. L-1021 and is located in the NE 1/4 NE 1/4 NE 1/4 of Section 14 Twp. 19S Rge. 38E
(B) Drilling Contractor O. R. Musslewhite License No. WD99
Street and Number Box 56
City Hobbs, State New Mexico
Drilling was commenced Feb. 9, 1957
Drilling was completed Feb 22, 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level Total depth of well 168
State whether well is shallow or artesian Shallow Depth to water upon completion 75

Section 2 PRINCIPAL WATER-BEARING STRATA

Table with 5 columns: No., Depth in Feet (From, To), Thickness in Feet, Description of Water-Bearing Formation. Data includes Red sand at 85-100 feet and another layer at 120-135 feet.

Section 3 RECORD OF CASING

Table with 8 columns: Dia in., Pounds ft., Threads in., Depth (Top, Bottom), Feet, Type Shoe, Perforations (From, To). Data includes 14 inch diameter casing with 18 pounds weight and no threads.

Section 4 RECORD OF MUDDING AND CEMENTING

Table with 5 columns: Depth in Feet (From, To), Diameter Hole in in., Tons Clay, No. Sacks of Cement, Methods Used.

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.
Street and Number City State
Tons of Clay used Tons of Roughage used Type of roughage
Plugging method used Date Plugged 19
Plugging approved by: Cement Plugs were placed as follows:

Table for Cement Plugs with 3 columns: No., Depth of Plug (From, To), No. of Sacks Used.

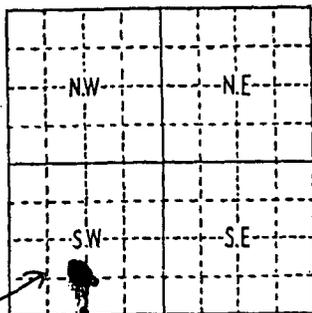
FOR USE OF STATE ENGINEER ONLY
Date Received MAY 7 1957
OFFICE OF THE STATE ENGINEER
GROUND WATER DIVISION
SANTA FE, NEW MEXICO
File No. L-1021-Sub 5 Use Jrs Location No. 19.38.14.222

# WELL RECORD

File No. L-545

INSTRUCTIONS: This form should be typewritten, and filed in the office of the State Engineer, (P.O. Box 1079) Santa Fe, New Mexico, unless the well is situated in the Roswell Artesian Basin, in which case it should be filed in the office of the Artesian Well Supervisor, Roswell, New Mexico. Section 5 should be answered only if an old artesian well has been plugged. All other sections should be answered in full in every case, regardless of whether the well drilled is shallow or artesian in character. This report must be subscribed and sworn to before a Notary Public.

**Sec. 1**



(Plat of 640 acres)  
Locate Well Accurately

Owner of well Frank Selman  
 Street and Number .....  
 Post Office Shobe, N. Mex.  
 Well was drilled under Permit No. L-545 and  
 is located in the NE 1/4 SE 1/4 NW 1/4 of Section 14  
 Township 19 Range 38  
 Drilling Contractor A. H. Howard, Jr.  
 Street and Number Box 328  
 Post Office Lovington, N. Mex.

Drilling was commenced 15 Oct 1947. Drilling was completed 26 Oct 1947.

Elevation at top of casing in feet above sea level .....

State whether well is shallow or artesian shallow

Total depth of well 124 feet.

**Sec. 2 PRINCIPAL WATER-BEARING STRATA**

No. 1, from 72 to 85, Thickness in feet 13, Formation quick sand  
 No. 2, from 87 to 120, Thickness in feet 33, Formation water sand  
 No. 3, from ..... to ....., Thickness in feet ....., Formation .....  
 No. 4, from ..... to ....., Thickness in feet ....., Formation .....  
 No. 5, from ..... to ....., Thickness in feet ....., Formation .....

**Sec. 3 RECORD OF CASING**

DIAMETER IN INCHES	POUNDS PER FOOT	THREADS PER INCH	NAME OF MANUFACTURER	FEET OF CASING	TYPE OF SHOE	PERFORATED		PURPOSE
						FROM	TO	
<u>1 1/2"</u>	<u>?</u>		<u>?</u>	<u>120</u>		<u>80</u>	<u>120</u>	

**Sec. 4 RECORD OF MUDDING AND CEMENTING**

DIAMETER OF HOLE IN INCHES	NUMBER OF SACKS OF CEMENT	METHODS USED	SPECIFIC GRAVITY OF MUD	TONS OF CLAY USED

**Sec. 5 PLUGGING RECORD OF OLD WELL**

Well is located in the ..... 1/4 ..... 1/4 ..... 1/4 of Section ....., Township .....  
 Range ..... Name of plugging contractor .....  
 Street and Number ..... Post Office .....  
 Tons of clay used ..... Tons of roughage used ..... Type of roughage .....  
 Was plugging approved by Artesian Well Supervisor .....

Cement plugs were placed as follows:

No. 1 was placed at ..... feet Number of sacks of cement used .....  
 No. 2 was placed at ..... feet Number of sacks of cement used .....  
 No. 3 was placed at ..... feet Number of sacks of cement used .....  
 No. 4 was placed at ..... feet Number of sacks of cement used .....  
 No. 5 was placed at ..... feet Number of sacks of cement used .....

(OVER)

STATE ENGINEER OF  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Caprock Communications Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P.O. Box 1560  
 City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-10,011 and is located in the:

a. \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ NW ¼ NW ¼ of Section 14 Township 19S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 6/13/88 Completed 6/15/88 Type tools Cable Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 140 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	135	75	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
7	22	Welded	0	141	141		75	140

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received June 22, 1988 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-10,011 Use DOMESTIC Location No. 19.38.14.1110

MEMORANDUM OF MEETING OR CONVERSATION

Telephone  Personal

Time 8:45 AM

Date 2-19-96

Originating Party

Other Parties

WES Root - consultant for

Pat Sanchez - OCD.

Pate Trucking, 392-6167

Subject Discharge PLAN GW-201 - Things that need to be addressed and committed to.

Discussion

- (1) AST'S require 133% 2ndry containment, Saddle Tanks only require pad & curb. (2) Sampling of the 2 wtr. wells for WQCC 3103 A.B.C. constituents and plugging of the Northern well. (3) Contingency PLAN needs to address WQCC 1-203 spill reporting / NMOC Rule 11b - contact the Hobbs District at 393-6161 for 24 hour reporting. (4) If fish Pond is put into service it will need to be sampled annually for WQCC 3103 A.B.C. and Bcrmed. (5) A time line for investigating the closure of the class II wells - sample for BTEX, TPH, & Haz. const./charac.

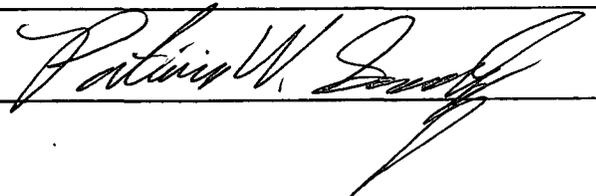
Conclusions or Agreements

(6) will submit a timeline to propose when the washout sump will be constructed - must meet OCD Guidelines - submit construction diagram for OCD approval - sub. Fe.

\* Mr. Root will call back wednesday 2,21,96 to confirm commitments - will file revisions.

Distribution File.

Signed



ACKNOWLEDGEMENT OF RECEIPT  
OF CHECK/CASH

I hereby acknowledge receipt of check No. [redacted] dated 2/5/96,  
or cash received on \_\_\_\_\_ in the amount of \$ 50.00

from Bruton Svc

for Pate Trucking - Hobbs GW-236  
(Facility Name) (DP No.)

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Submitted to ASD by: R. Anderson Date: 3/25/96

Received in ASD by: Angela Herrera Date: 3-29-96

Filing Fee  New Facility \_\_\_\_\_ Renewal \_\_\_\_\_  
Modification \_\_\_\_\_ Other \_\_\_\_\_  
(specify)

Organization Code 521.07 Applicable FY 96

To be deposited in the Water Quality Management Fund.  
Full Payment \_\_\_\_\_ or Annual Increment \_\_\_\_\_

6w-236

BRUTON SERVICE CO. INC. 1-96  
P. O. BOX 1136 806-592-2981  
DENVER CITY, TX 79323

25 1996 95-108/1122

PAY TO THE ORDER OF NM EIO Water Quality Mgmt \$ 50.00  
Fifty Dollars & 00/100 DOLLARS

Western Commerce Bank Hobbs, NM

FOR Filing Fee on Discharge Plan Larry May

© Clarks American Guardian® Safety Blue DEBBL

District I - (505) 393-6161  
P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

New Mexico  
Energy Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

Revised 8/8/95

Submit Original  
Plus 1 Copy  
to Santa Fe  
1 Copy to appropriate  
District Office

GW-236

DISCHARGE PLAN APPLICATION FOR OILFIELD SERVICE FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

New  Renewal  Modification

- Type: OIL AND GAS EXPLORATION SERVICE COMPANY
- Operator: Pate TRUCKING COMPANY, INC.  
Address: 3800 SOUTH EUNICE HIGHWAY, HOBBS, NEW MEXICO 88240  
Contact Person: MR. GARY REID, GENERAL MANAGER Phone: 505-392-8844
- Location: NW 14 NW 14<sup>OF SW/4</sup> Section 14 Township 7195 Range R 38E  
Submit large scale topographic map showing exact location.
- Attach the name and address of the landowner of the facility site.
- Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
- Attach a description of all materials stored or used at the facility.
- Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
- Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
- Attach a description of proposed modifications to existing collection/treatment/disposal systems.
- Attach a routine inspection and maintenance plan to ensure permit compliance.
- Attach a contingency plan for reporting and clean-up of spills or releases.
- Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
- Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
- CERTIFICATION

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

Name: GARY D. REID Title: Gen. Mgr.  
Signature: Gary D. Reid Date: 2-1-96

RECEIVED

FEB 09 1996

Environmental Bureau  
Oil Conservation Division

RECEIVED

FEB - 7 1996

2059  
USFWS - NMESSO

NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

**(GW-236) - Pate Trucking Company, Inc., Mr. Gary Reid, (505)-392-8844, 3800 South Eunice HWY., Hobbs, NM, 88240, has submitted a Discharge Plan Application for their Hobbs facility located in the NW/4 NW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico. Any planned discharges or incidental wastes will be collected in a closed top receptacle and disposed of at an OCD approved facility. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 55 feet with a total dissolved solids concentration of approximately 170 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.**

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of February, 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

**NO EFFECT FINDING**

The described action will have no effect on listed species, wetlands, or other important wildlife resources.

Date SEAL February 13, 1996

Consultation # CW96OCD-1

Approved by [Signature]

U.S. FISH and WILDLIFE SERVICE  
NEW MEXICO ECOLOGICAL SERVICES FIELD OFFICE  
ALBUQUERQUE, NEW MEXICO

[Signature]  
WILLIAM J. LEMAY, Director

WJL/pws

# Affidavit of Publication

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF LEA )

Joyce Clemens being first duly sworn on oath deposes and says that he is **Adv. Director** of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled  
**Notice Of Publication**

~~XXXXXXXXXXXX~~ .....

~~XXXXXXXXXXXX~~ .....

~~XXXXXXXXXXXX~~, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, ~~once each week on the~~

~~same day of each week~~ for **one (1) day**

~~XXXXXXXXXXXX~~, beginning with the issue of  
**February 8** ....., 19.. **96**

and ending with the issue of  
**February 8** ....., 19.. **96**

And that the cost of publishing said notice is the sum of \$ **44.00**

which sum has been (Paid) ~~XXXXXXXX~~ as Court Costs

*Joyce Clemens*  
.....

Subscribed and sworn to before me this **19th**  
day of **February** ....., 19.. **96**

*William J. Lemay*  
.....  
Notary Public, Lea County, New Mexico

My Commission Expires **Sept. 28** ....., 19.. **98**

**LEGAL NOTICE  
NOTICE OF PUBLICATION  
STATE OF NEW MEXICO  
ENERGY, MINERALS AND  
NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

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GIVEN under the Seal of the State of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of February, 1996.

**STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION  
WILLIAM J. LEMAY, Director  
WJL/pws**

SEAL  
Published in the Lovington Daily Leader February 8, 1996.

**AFFIDAVIT OF PUBLICATION**

No. 35887

STATE OF NEW MEXICO  
County of San Juan:

**ROBERT LOVETT** being duly sworn says: That he is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s):

Monday, February 12, 1996

and the cost of publication is: \$61.02

  
\_\_\_\_\_

O 2/14/96 **ROBERT LOVETT** appeared before me, whom I know personally to be the person who signed the above document.

  
\_\_\_\_\_ My Commission Expires March 21, 1998



**COPY OF PUBLICATION**

**Legals**



**NOTICE OF PUBLICATION**

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

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of February, 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

/s/William J. LeMay  
WILLIAM J. LEMAY, Director

WJL/pws

SEAL

Legal No. 35887 published in The Daily Times, Farmington, New Mexico on Monday, February 12, 1996.

CONSERVATION DIVISION  
RE  
52  
95 FE

# The Santa Fe New Mexican

Since 1849 We Read You

NEW MEXICO OIL CONSERVATION  
ATTN: SALLY MARTINEZ  
P.O. BOX 6429  
SANTA FE, N.M. 87505-6429

AD NUMBER: 466631

ACCOUNT: 56689

LEGAL NO: 59059

P.O. #96199002997

162 LINES once at \$ 64.80

Affidavits: 5.25

Tax: 4.38

Total: \$ 74.43

RECEIVED

FEB 16 1996

Environmental Bureau  
Oil Conservation Division

### AFFIDAVIT OF PUBLICATION

**NOTICE OF PUBLICATION**  
STATE OF NEW MEXICO  
Energy, Minerals and  
Natural Resources  
Department  
Oil Conservation Division

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd of February, 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION  
WILLIAM J. LEMAY, Director  
Legal #59059  
Pub. February 9, 1996

STATE OF NEW MEXICO  
COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication # 59059 a copy of which is hereto attached was published in said newspaper once each week for one consecutive week(s) and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 9th day of FEBRUARY 1996 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/

Betsy Perner  
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 9th day of FEBRUARY A.D., 1996



OFFICIAL SEAL  
Candace C. Ruiz  
NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires: 9/24/99

Candace C. Ruiz

District I - (505) 393-6161  
P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

New Mexico  
Energy Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

Revised 8/8/95

Submit Original  
Plus 1 Copy  
to Santa Fe  
1 Copy to appropriate  
District Office

GW-236

DISCHARGE PLAN APPLICATION FOR OILFIELD SERVICE FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

New  Renewal  Modification

1. Type: OIL AND GAS EXPLORATION SERVICE COMPANY
2. Operator: Pate Trucking Company, Inc.  
Address: 3800 South Eunice Highway, Hobbs, New Mexico 88240  
Contact Person: Mr. Gary Reid, General Manager Phone: 505-392-8844
3. Location: NW 14 NW 14<sup>05 SW/4</sup> Section 14 Township T19S Range R38E  
Submit large scale topographic map showing exact location.
4. Attach the name and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATION

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

Name: GARY D. REID  
Signature: Gary D. Reid

Title: Gen. Mgr.  
Date: 2-1-96

RECEIVED

FEB 09 1996

Environmental Bureau  
Oil Conservation Division

# DISCHARGE PLAN

prepared for

## **Pate Trucking Company, Inc.**

for the facility located at  
3800 South Eunice Highway  
Hobbs, New Mexico 88240

RECEIVED

FEB 09 1996

Environmental Bureau  
Oil Conservation Division

Prepared by:

### **F. Wesley Root**

3624 West Casa Verde  
Hobbs, New Mexico 88241  
(505) 392-8844

February 7, 1996

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- II. Name of Operator or Legally Responsible Party and Local Representative**
- III. Location of Discharge**
- IV. Landowners**
- V. Facility Description**
- VI. Materials Stored or Used at the Facility**
- VII. Sources and Quantities of Effluent and Waste Solids Generated at the Facility**
- VIII. Description of Current Liquid and Solid Waste Collection/Storage/Disposal Procedures**
- IX. Proposed Modifications**
- X. Inspection, Maintenance, and Reporting**
- XI. Spill/Leak Prevention and Reporting Procedures (Contingency Plans)**
- XII. Site Characteristics**
  - 1. Surface Bodies of Water and Water Wells
  - 2. Water Quality
  - 3. Geology/Hydrology
  - 4. Flooding Potential and Protection Measures
- XIII. Other Compliance Information**
  - Appendix A - Figures
  - Appendix B - MSD Sheets
  - Appendix C - Spill/Leak Contingency Plans
  - Appendix D - Water Well Records

**I. Type of Operation**

Pate Trucking Company, Inc. is an Oil and Gas Service Company that provides transport services to clients in the oilfield. The facility is located on Highway 18 approximately 1.5 miles south of the corporate boundary of the city of Hobbs, New Mexico.

The major purpose of the facility is to provide an equipment yard, office, routine maintenance building, and chemical storage area for Pate Trucking Company, Inc. No non-domestic wastes are disposed of at the facility. The only domestic wastes discharged to the environment at the site is effluent from the office septic system.

The normal hours of operation are 7:00 AM to 5:00 PM Monday through Friday. The facility is fenced and secured during hours when company personnel are not present.

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

Operator: Pate Trucking Company, Inc.  
3800 South Eunice Highway  
Hobbs New Mexico 88240  
Telephone: 505-392-8844

Responsible Party: Same as above

Local Representatives: Mr. Gary Reid - General Manager  
Mr. Mark Mead - Vice President  
Mr. Mike Harvey - Sale Manager  
Mr. Allen Hodge - Safety Officer

**III. Location of Potential Discharge**

The facility is located in the Northwest Quarter of the Northwest Quarter of Southwest Quarter of Section 14 , Township 19 South, Range 38 East, N.M.P.M., Lea County, New Mexico (Figure 1, Appendix A).

**IV. Landowners**

Currently, Pate Trucking Company, Inc. is leasing the facility. The landowner of record is:  
Mr. Darrell Compton  
1401 North Avenue D  
Denver City, Texas 79323  
Telephone: 806-592-7006

**V. Facility Description**

The facility is situated on approximately seven acres of land. A diagram of the facility including facility/property boundaries, fences, pits, berms, tanks, locations of discharges, storage facilities, disposal facilities, processing facilities, and other relevant areas is shown in Figure 2, Appendix A. The facility consists of the following:

- An office building
- A maintenance/shop building
- One abandoned non-registered water well
- One active non-registered water well
- An abandoned concrete wash pad with sump
- Two abandoned leech fields (Class V injection wells)
- An active underground septic system
- An above ground diesel storage tank
- An above ground used oil storage tank
- An above ground liquid petroleum gas (LPG) storage tank
- An above ground KCL storage tank
- An unlined fish pond
- A drum storage area with an impermeable surface
- An equipment storage yard

All storage tanks at the facility are above ground (AST) and constructed of either fiberglass or carbon steel. The storage tanks are used to store wastes (used oil), chemicals (KCL water), and fuels (diesel and LPG) and are surrounded by secondary containment areas. Secondary containment is provided by plastic lined earthen dikes. All secondary containment areas have the capacity to hold at least 110% of the volume of the tank within the containment area. There are no drains or underground piping associated with these areas. Should an accumulation of fluids/rainfall occur within the confines of the containment areas, the contents are inspected and characterized in accordance with state and Federal regulations prior to discharge/disposal.

The abandoned concrete wash pad with sump and the two abandoned leech fields (Class V injection wells) were abandoned prior to and have not been used since Pate Trucking took over the facility in September 1995. A proposed work plan to close the two abandoned leech fields in accordance with Unlined Surface Impoundment Closure Guidelines published by the NMOCD is currently being developed for NMOCD approval.

The drum storage area consists of a concrete pad (former wash pad) that is dedicated for the temporary storage of chemical drums which contain various chemicals used in the oilfield during well workover and completion operations. Chemicals are stored at the area for short periods of time (typically 1 to 7 days) prior to transport to the job site by Pate Trucking personnel.

The abandoned water well is enclosed in a metal shed and secured by a padlock. The active water well is enclosed in a metal shed and used to supply water for the office septic system.

The unlined fish pond was constructed for decorative purposes only and is surrounded by an earthen berm to prevent the inflow of any stormwater runoff from the facility.

The active leach field adjacent to the office building is used to dispose of domestic sewage generated from Office bathrooms. No other waste streams are mixed with sewage

VI. Materials Stored or Used at the Facility

<b>Table 1</b> <b>Materials Stored or Used at the Hobbs, New Mexico Facility</b> <b>Pate Trucking Company, Inc.</b>				
<b>Category per NMOCD Discharge Plan Guidelines</b>				
<b>Material Stored</b>	<b>General Composition</b>	<b>Solid or Liquid</b>	<b>Container Type</b>	<b>Volume Stored</b>
<b>Category 1. Drilling Fluids</b>				
Not applicable	None	None	None	None
<b>Category 2. Brines (KCL, NaCl, etc.)</b>				
Claytrol-TCS	Quaternary ammonium compound	solid	lined paper	40 sacks
KCL water		Liquid	AST	250 bbls
<b>Category 3. Acids/Caustics (MSDS provided in Appendix 1)</b>				
Not applicable	None	None	None	None
<b>Category 4. Detergents/soaps</b>				
Chemex Super Foamer -A	Ammonium salt of sulfated liner alcohol ethoxylate	Liquid	55-gal drum	1 drum
<b>Category 5. Solvents and degreasers (MSDS provided in Appendix 1)</b>				
Mineral Spirits	Petroleum Distillates	Liquid		5 gallons
Kerosene	Petroleum Distillates	Liquid		5 gallons
<b>Category 6. Parafin Treatment/Emulsion Breakers (MSDS provide in Appendix 1)</b>				
Paratrol X-10	Parafin solvent blend	Liquid	Drum	*
AKA Surfac -10	Surfactant blend	Liquid	Drum	*
<b>Category 7. Biocides (MSDS provided in Appendix 1)</b>				
Not applicable	None	None	None	None
<b>Category 8. Others</b>				
HD-5 Propane	Propane, ethane, propylene	Liquid	AST	1000 gal
No. 2 Diesel Fuel	Light hydrocarbon distillates	Liquid	AST	1000 gal
Fleet Heavy Duty Motor Oil	Solvent refined hydrocarbon distillates	Liquid	1 gallon plastic	24 gal
Antifreeze	Inhibited Ethylene Glycol	Liquid	Drum	55 gal
* The volume of chemical drums temporarily stored prior to transport will vary by job.				

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

Table 2 Sources and Quantities of Effluent and Waste Solids Generated at the Hobbs, New Mexico Facility Pate Trucking Company, Inc.			
Category per NMOCD Discharge Plan Guidelines			
Effluent Type	Volume Generated	Additive Type	Additive Volume
<b>Category 1. Truck Wastes (Original Contents Trucked)</b>			
Not applicable	None	None	None
<b>Category 2. Truck, Tank, and Drum Washing</b>			
Oil/water emulsion generated from cleaning of truck tanks *	20 bbls/month	Residues of KCL water, crude oil	10 gal/month
<b>Category 3. Steam Cleaning of Parts, Equipment Tanks</b>			
Not applicable	None	None	None
<b>Category 4. Solvent/Degreaser Use</b>			
Sediment residue generated from cleaning small tools/parts	0.2 gal/month	None	None
<b>Category 5. Spent Acids or caustics, or Completion Fluids</b>			
Not applicable	None	None	None
<b>Category 6. Waste Slop Oil</b>			
Not applicable	None	None	None
<b>Category 7. Waste Lubrication and Motor Oils</b>			
Used motor oils from company vehicles	55 gal/month	None	None
<b>Category 8. Oil Filters</b>			
Used oil filters from company vehicles	30 filters/month	None	None
<b>Category 9. Solids and Sludges from Tanks</b>			
Sediment residue generated from cleaning of truck tanks *	1 bbl/month	None	None
<b>Category 10. Painting Wastes</b>			
Various types of non-lead base paints and hydrocarbon based thinners	1 gal/year	None	None
<b>Category 11. Sewage</b>			
Domestic sewage generated from Office. No other waste streams are mixed with sewage	50 gal/day	None	None
<b>Category 12. Other Waste Liquids</b>			
Not Applicable	None	None	None
<b>Category 13. Other Waste Solids</b>			
Industrial solid waste - office trash, paper, plastic, etc.	150 lb/month	None	None
Spent automotive batteries **	6 batteries/yr	lead, acid	Unknown
* Tank truck cleaning operations are performed offsite at the Parabo Disposal Facility with the rinseate, residues, and solid waste generated from these operations disposed of at the NMOCD permitted facility.			
** Used batteries are exchanged for new batteries at the time of replacement.			

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

1. Truck Wastes (Original Contents Trucked) -Not applicable
2. Truck, Tank, and Drum Washing - No washing of vehicles, tanks, or drums is currently performed at the Pate Trucking facility. All exterior washing of equipment and vehicles is performed at offsite commercial facilities. Chemical drums present at the facility typically belong to a client/chemical service company and are temporarily stored on a concrete pad one to seven days prior to transport to the job site. The Pate Trucking provides storage/transport service only. The client/chemical service company is responsible for the application of the chemical at the job site and the collection, storage, and disposal of any wastes generated.
3. Steam Cleaning of Parts, Equipment, or Tanks - No steam cleaning of parts, equipment, or tanks is currently performed at the Pate Trucking facility. Periodic cleaning and inspection of tank interiors is performed offsite by commercial facilities equipped for these services.
4. Solvent/Degreaser Use - Solvent/degreaser use at the facility is restricted to a small parts cleaning unit located in the shop building. This unit is a closed loop system which recirculates the solvent. No wastes generated by the unit are disposed of at the facility.
5. Spent Acids or caustics, or Completion Fluids - Not applicable
6. Waste Slop Oil - Not applicable
7. Waste Lubrication and Motor Oils - Waste oil from vehicle maintenance operations performed onsite by Pate Trucking personnel is collected and stored in a labelled above-ground storage tank. The AST is enclosed within a lined secondary containment. The stored oil is periodically removed (approximately every 90 days) for reclaiming by a permitted used oil recycler. All reclaimed oil is manifested prior to transport.
8. Oil Filters - Oil filters removed during vehicle maintenance are drained of excess oil and stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.
9. Solids and Sludges from Tanks - No washing of vehicles, tanks, or drums is currently performed at the Pate Trucking facility. All tank truck cleaning operations are performed at an offsite commercial facility (Parabo Disposal Facility). The rinseate, residues, and solid waste generated from these operations is disposed of at the NMOCD permitted facility

10. Painting Wastes - Painting of tanks, vehicles, and equipment is performed off-site by commercial facilities. Any painting wastes generated by occasional touch-up work performed by Pate Trucking personnel are allowed to dry and the solids stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.
11. Sewage - Domestic sewage from the Pate Trucking office is discharged through the active septic system located north of the office building. No other waste streams are mixed with the sewage.
12. Other Waste Liquids - Not applicable
13. Other Waste Solids - Industrial solid waste consisting of general refuse (office trash, paper, plastic, etc.) is stored in the waste bin behind the office pending transport and disposal at the municipal landfill by a commercial waste management company.

#### **IX. Proposed Modifications**

1. Verify that all lines that could permit effluent to enter two abandoned leach systems (Class V. injection wells) are plugged. Sample soils, remove leach systems and close in accordance with NMOCD unlined surface impoundment closure guidelines. Closure operations will follow a work plan that has been submitted to and approved by the NMOCD prior to initiating closure.
2. Develop a written procedure to perform an annual inspection of the below grade sump in the maintenance building. The procedure will include cleaning, testing, disposal of any waste generated, inspection, and documentation of findings.

#### **X. Inspection, Maintenance, and Reporting**

Chemical and waste storage area facilities are visually inspected routinely (daily) for leaks, corrosion or integrity problems; accumulated liquids in containment areas; improper labeling and storage practices; and open or deteriorated containers. Each storage area (except for the temporary drum storage area) is enclosed within a plastic lined earthen berm, isolated from other potential waste streams, and contains no buried piping.

Normal maintenance of the material storage facilities is performed by facility personnel under supervision of the General Manager. Routine maintenance includes inspection of storage areas, remediation of minor spills resulting from normal site operations which pose no threat to personnel and the repair of leaking fittings or valves.

The manager or Emergency Coordinator will determine which activities can be performed by facility personnel and which need to be contracted out due to the potential hazards involved.

Inspection and maintenance records are maintained in the Pate Trucking office which include inspection dates, results, actions taken, and modifications or repairs performed.

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

The current contingency plan is presented in Appendix C.

## **XII. Site Characteristics**

### **1. Surface Bodies of Water and Water Wells**

A field survey of the facility and surrounding area identified no bodies of water or streams, or other watercourses within one mile of the Pate Trucking facility, other than the on-site fish pond (which does not contain water at this time). A storm water drainage basin operated by the city of Hobbs (which does not contain water at this time) is located approximately 3/4 of a mile north-northwest of the facility. The drainage basin is located in an upgradient position relative to the facility. No groundwater discharge sites (seeps, springs, marshes, or swamps) were identified within one mile of the facility.

Approximately 13 water wells were identified within a 1/4 mile radius and 41 wells were identified within an one mile radius of the facility during a review of the water well completion files at the New Mexico State Engineers Office (NMSEO) in Roswell, New Mexico. According to the well records submitted to the NMSEO, the well depths for the area ranged from approximately 70 feet to 170 feet. Static water levels reported at the time the wells were completed ranged from 32 feet to 80 feet below ground surface. The wells are completed in the Ogallala Formation (primary water producing zone in the site area). The data obtained from the NMSEO is presented in Tables 3 and 4.

### **2. Water Quality**

Water quality within the High Plains Aquifer in the site area is controlled by the composition of the recharge from rainfall and leakage from adjacent formations. Based on a review of the available published data, groundwater in the site area contains total dissolved solids (TDS) concentrations of approximately 150 parts per million (ppm) to 200 ppm. Water quality data obtained from the NMSEO reported chloride levels ranging from 188 ppm to 830 ppm (Table 3). No water quality data was available for the two wells located on the facility. However, preparations to sample these wells are underway and the results will be forwarded to the NMOCD when completed.

3. Geology/Hydrology

The site is located on the northwestern margin of the Central Basin Platform, a north south trending structural high that separates the Midland Basin to the east from the Delaware Basin to the west. Geologic formations at depth beneath the site dip gradually toward the south and west into the Delaware Basin and generally increase in thickness basinward. The shallower formations (Middle Triassic-age and younger) were deposited on several erosional unconformities and generally dip gradually to the southeast.

The geologic formation that outcrops in the site area is the Ogallala Formation of Tertiary age which is often covered by a thin layer of wind-deposited (eolian) dune sands of Recent age or Quaternary age alluvium. The Ogallala Formation ranges in thickness from approximately 100 to 200 feet and rests unconformably on Triassic-age sediments in the site area. Thickness of the Ogallala formation is primarily controlled by the paleotopography of the sub-Ogallala erosional surface with its greatest thickness attained along paleovalleys and a thinning of the formation along paleodivide areas.

The primary source of groundwater in the site area is provided by the High Plains Aquifer. The High Plains Aquifer is composed of hydraulically connected portions of the Quaternary Alluvium and Ogallala Formation. The contact between the Tertiary-age Ogallala formation and underlying Triassic-age sediments is an erosional unconformity that slopes regionally to the southeast. The unconformity is marked by an irregular thickness of Triassic-age shales, and sands (red beds). These red beds typically represent the lower limit of usable (potable) water in the area.

Based on a review of the available well logs of the site area, the depth to the water table is approximately 50 to 60 feet below ground surface. Groundwater movement beneath the site is toward the east-southeast and appears to parallel the drainage trend of the local topography.

The subsurface of the site consists of three general units; an upper unit (0 to 5 feet thick) of well-drained sandy loam belonging to the Kimbrough Soil Series; a middle unit (extending from the base of the loam to a depth of approximately 45 feet) composed of interbedded calcareous sands (caliche), limestones, and silicious sandstone; and a third unit composed of fine-grained, slightly calcareous to calcareous sands, clays, and often a scattered gravel. This unit extends from approximately 45 feet to the top of the Triassic-age shales, and sands (red beds).

**Table 3**  
**Water Quality of Water Wells with 1/2 Mile of Pate Trucking Facility**  
**Analytical Results Obtained from the State Engineers Office**

Well Owner	Permit No.	Total Depth	Depth to Water	Water Zone	Date Sampled	Well Use	Well				Locatio		Water		Quality	
							Township	Range	Section	Location	Chloride	SC	Temperature	TDS		
Marroquin, Frank	W-1	100	--	TOG	12/20/79	IRR	T19S	R38E	15	41214	188	1348	--	--		
Marroquin, Frank	W-2	100	--	TOG	12/20/79	DOM	T19S	R38E	15	412321	186	1049	--	--		
Marroquin, Frank	W-2	100	--	TOG	11/29/84	DOM	T19S	R38E	15	412321	276	1331	--	--		
Marroquin, Frank	W-2	100	--	TOG	07/12/90	DOM	T19S	R38E	15	412321	450	1988	--	--		
Terry, Johnny	W-3	--	--	TOG	11/29/84	DOM	T19S	R38E	15	412322	284	1602	--	--		
Viro-Montes	W-4	--	--	TOG	11/12/84	DOM	T19S	R38E	15	41413	158	1178	--	--		
Champion Chemical	W-5	--	--	TOG	11/30/79	DOM	T19S	R38E	15	422444	186	1405	66	--		
Champion Chemical	W-6	123	--	TOG	08/17/77	DOM	T19S	R38E	15	424233	504	2370	82	--		
Champion Chemical	W-6	123	--	TOG	11/29/84	DOM	T19S	R38E	15	424233	372	2208	--	--		
Champion Chemical	W-7	142	--	TOG	08/25/65	COM	T19S	R38E	15	42441	830	3110	--	--		

Permit No. is issued by State Engineer. Where no well completion record was identified in State files a unique number beginning with a "W" was used to reference the well in this report.

Location uses state number code

Well Use - DOM=Domestic, IRR=Irrigation, COM=Commerical, OWD=Oil well drilling

-- No data available

**Table 4**  
**Summary of Water Wells Identified with in 1/2 mile of Pate Trucking Facility**  
**Well Records on File with the State Engineers Office**

Well Owner	Permit No.	Total Depth	Depth to Water	Date Completed	Date Plugged	Well Use	Well Township	Well Range	Well Section	Well Location
Narroquin, Franciso	L-6759	100	45	03/10/71	--	DOM	T19S	R38E	15	221
Warroquis, Francisco	L-6858	100	45	12/06/71	--	DOM	T19S	R38E	15	230
Townsend, Bobby	L-7357	101		04/12/75	--	DOM	T19S	R38E	15	24221
Lee, G. D.	L-8046	130	58	03/20/80	--	DOM	T19S	R38E	15	244
Sherrill, Wilbur	L-7359	117	57	04/11/75	--	DOM	T19S	R38E	15	24444
Dean, T. M.	L-2667	108	70	02/21/57	--	DOM	T19S	R38E	15	400
Bonner, C. C.	L-7512	100	32	04/14/76	--	--	T19S	R38E	15	4122
Weldy, G. W.	L-7882	100	32	04/19/79	--	DOM	T19S	R38E	15	41100
Glasspoole, Frank	L-6101	100	38	12/22/85	--	DOM	T19S	R38E	15	41131
Clark, J. C.	L-4489	100	41	08/28/60	--	DOM	T19S	R38E	15	413
Fulkerson, James	L-10046	120	70	11/26/88	--	DOM	T19S	R38E	15	4130
Benny, Bobby	L-9821	100	51	05/03/86	--	DOM	T19S	R38E	15	41340
Dobbins	L-9012	100	32	08/02/82	--	DOM	T19S	R38E	15	414
Dobbins, Hazel	L-9310	120	58	08/29/83	--	DOM	T19S	R38E	15	414
Dobbins, B. R.	L-7381	100	50	05/16/75	--	DOM	T19S	R38E	15	41412
Attaway, Neal	L-5013	100	47	04/09/63	--	DOM	T19S	R38E	15	420
Scott, R. W.	L-9896	100	38	02/17/87	--	DOM	T19S	R38E	15	42124
Ballew, Wayne	L-4107	112	60	04/23/59	--	DOM	T19S	R38E	15	422
Barton, J. E.	L-4622	70	46	06/01/61	--	DOM	T19S	R38E	15	422
Morrow, Terry	L-7379	120	44	05/31/75	--	DOM	T19S	R38E	15	42312
Phar, T.	L-4539	100	48	11/05/60	--	DOM	T19S	R38E	15	424
Hardin & Houston	L-6733	123	50	11/16/79	--	DOM	T19S	R38E	15	424233
Spradley, Jim	L-10322	133	44	04/13/93	--	D&S	T19S	R38E	15	42424
Hardin & Houston	L-5623	142	52	06/06/64	--	COM	T19S	R38E	15	42441
Bingham, M. L.	L-2689	83	49	11/30/54	--	--	T19S	R38E	15	444
Bingham, N. L.	L-3248	123	48	04/28/58	--	IRR	T19S	R38E	15	44412
Aaron, A. A.	L-8352	118	50	09/17/80	--	DOM	T19S	R38E	15	44
Tarber, Joe	L-10138	170	60	12/15/90	--	IRR	T19S	R38E	15	44333
Wallen Production	L-8250	125	80	01/12/80	--	OWD	T19S	R38E	15	34244
Younger Construction	L-3658	120	50	08/28/57	--	DOM	T19S	R38E	14	310
Selman, J. A.	L-1021	168	75	02/22/57	--	IRR	T19S	R38E	14	222
Selman, Frank	L-345	124	--	10/26/47	--	--	T19S	R38E	14	142
Selman	W-8	125	65	04/13/53	--	--	T19S	R38E	14	240
Caprock Communications	L-10011	140	60	06/15/88	--	DOM	T19S	R38E	14	1110

Permit No. is issued by State Engineer. Where no well completion record was identified in State files a unique number beginning with a "W" was used to reference the well in this report.

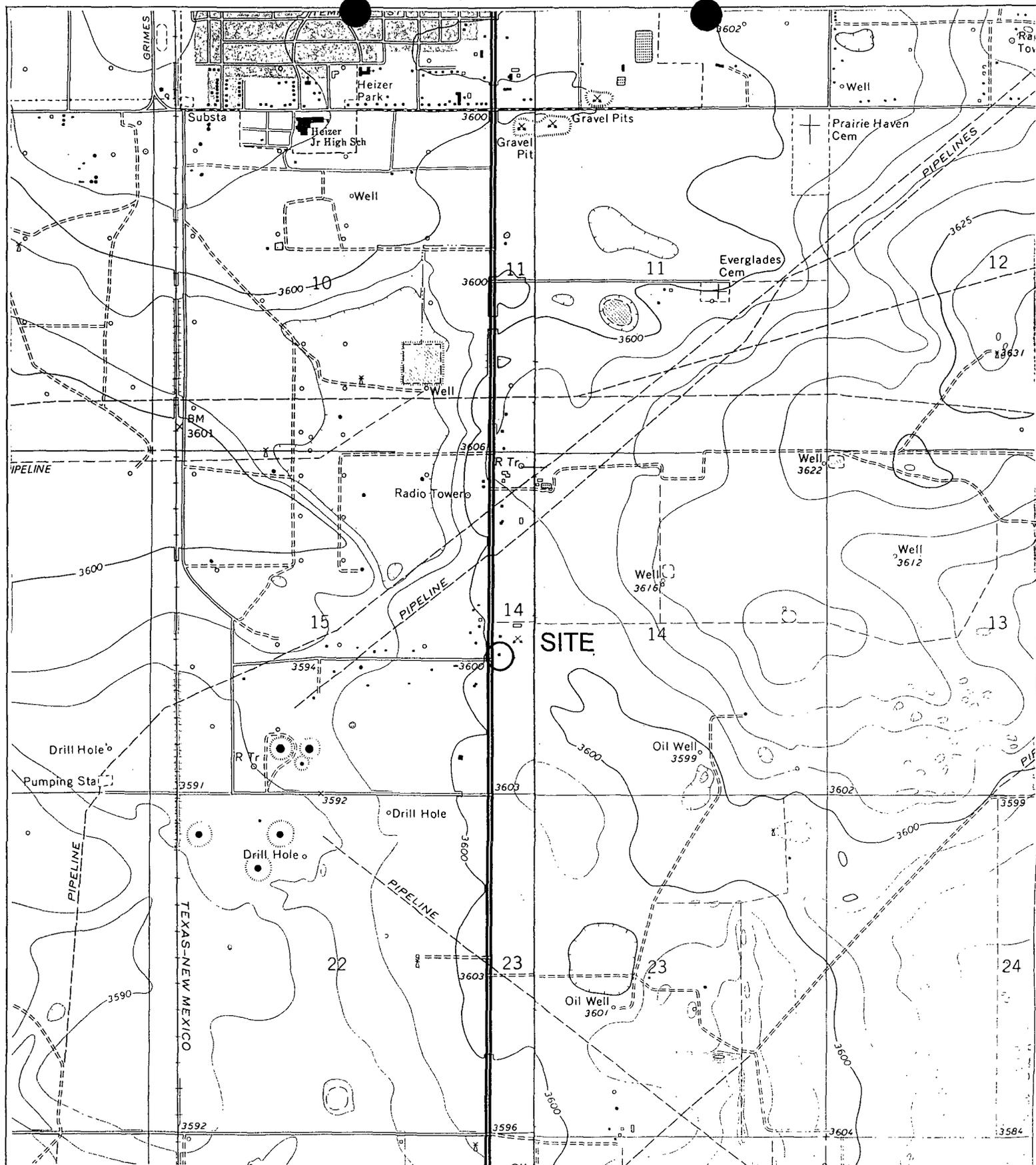
Location uses state number code

-- No data available

Well Use - DOM=Domestic, IRR=Irrigation, COM=Commerical, OWD=Oil well drilling

**Appendix A**

**Figures**



**USGS TOPOGRAPHIC MAP**

HOBBS WEST & HOBBS EAST  
 QUADRANGLES  
 LEA Co., NEW MEXICO  
 1969 PHOTOREVISED 1979



**PATE TRUCKING Co., Inc.**

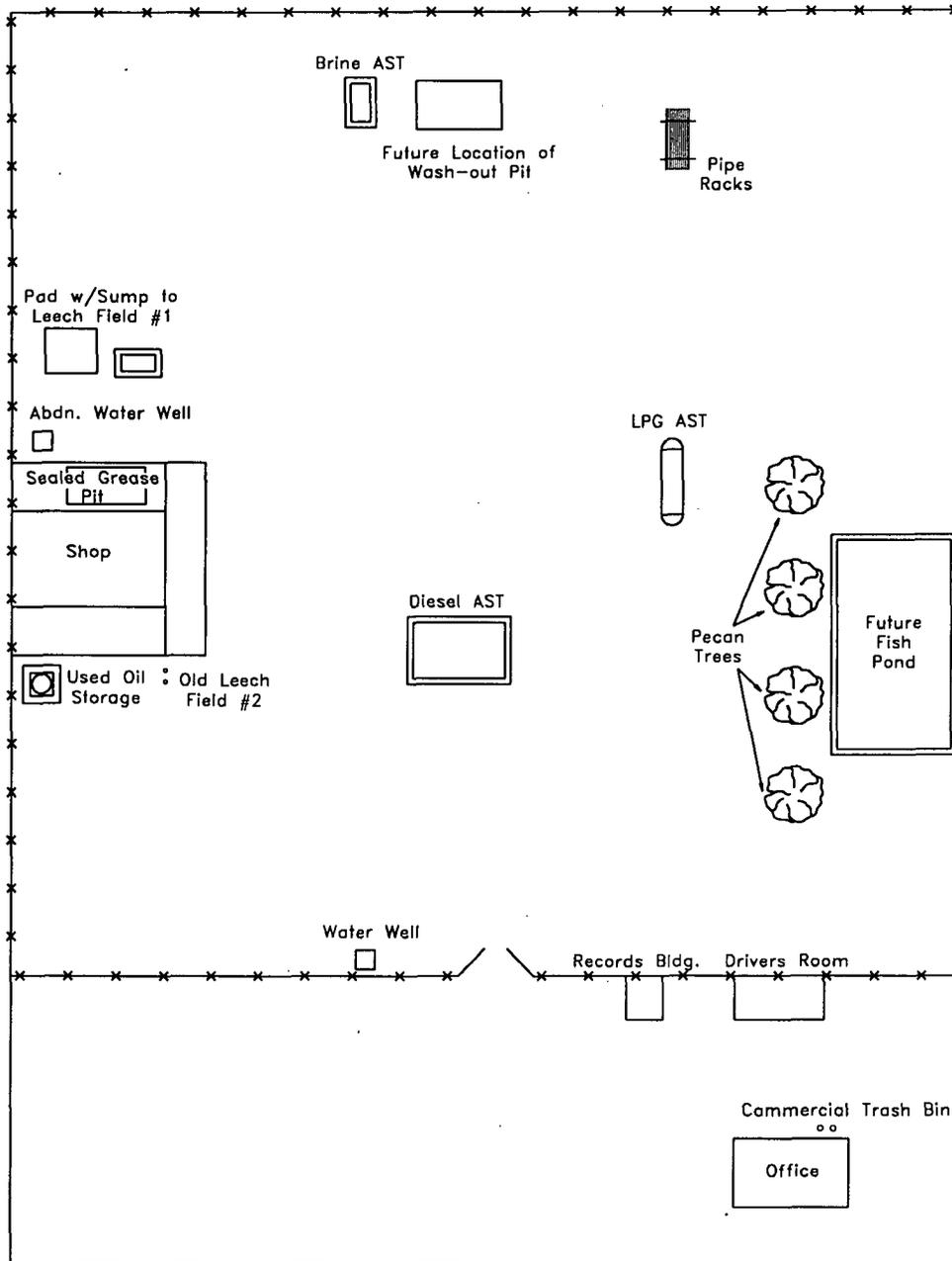
CONTOUR TOPOGRAPHY  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC. 14 T19S, R38E  
 HOBBS, NEW MEXICO

SCALE: 1" = 2000'

JOB #

SHEET 1 OF 2

FILE

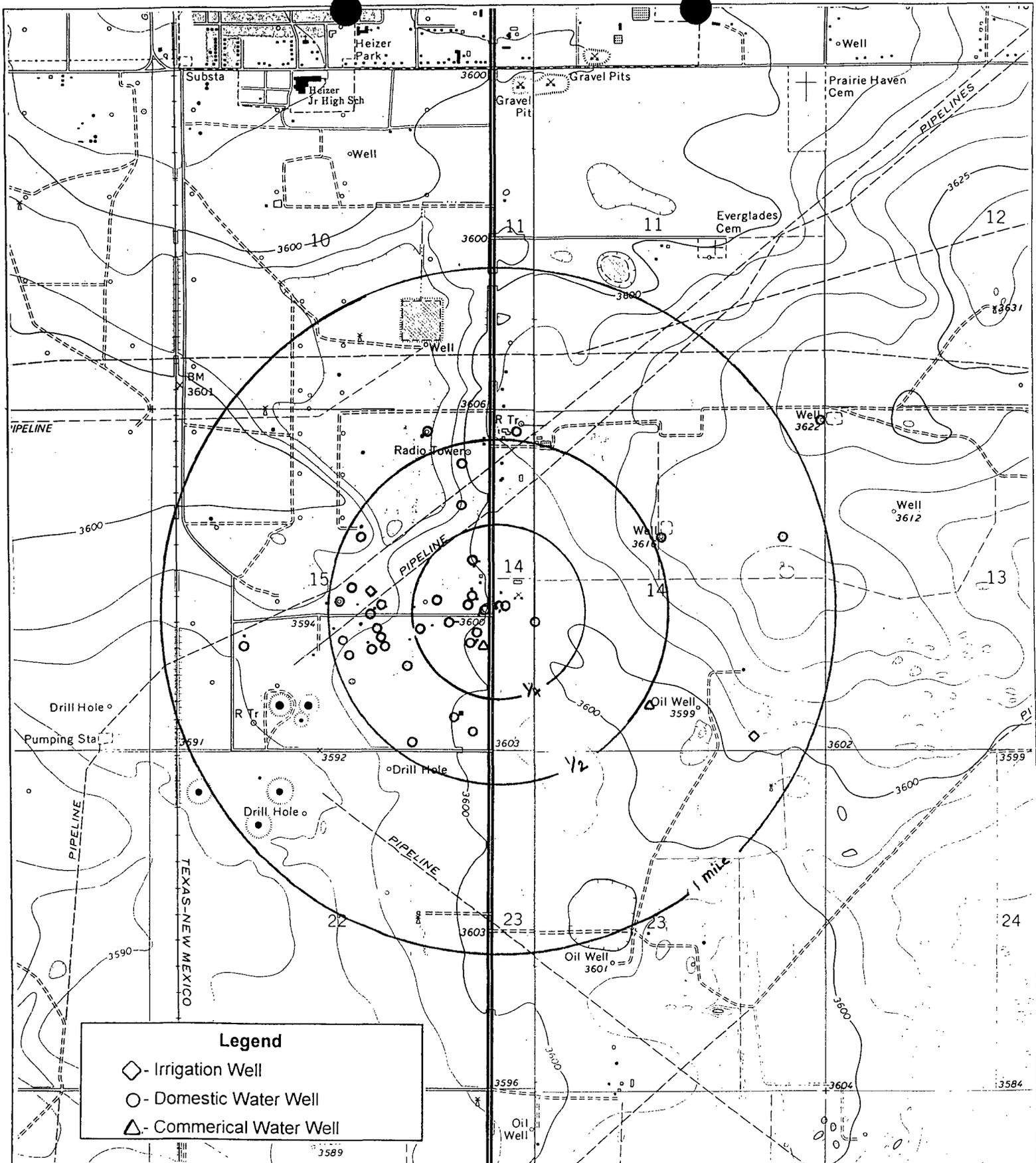


AST = Aboveground Storage Tank

# PATE TRUCKING Co., Inc.

SITE MAP  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC,14, T19S, R38E  
 HOBBS, NEW MEXICO

DATE:2-7-96	DRAWN M.F.G.	REV. DATE	DIV
SCALE: 1" = 100'		JOB #	
DRAWING 3 OF 3		FILE:	



**Legend**

- ◇ - Irrigation Well
- - Domestic Water Well
- △ - Commercial Water Well

**USGS TOPOGRAPHIC MAP**

HOBBS WEST & HOBBS EAST  
 QUADRANGLES  
 LEA Co., NEW MEXICO  
 1969 PHOTOREVISED 1979



**PATE TRUCKING Co., Inc.**

WATER WELL LOCATION MAP  
 3800 S. EUNICE HIGHWAY  
 NW4/SW4 SEC. 14 T19S, R38E  
 HOBBS, NEW MEXICO

SCALE: 1" = 2000'  
 SHEET 1 OF 2

JOB #  
 FILE

**Appendix B**

**Material Safety Data Sheets (MSDS)**

A-2  
F-0  
K-0  
S-D



# Chemical Company

P. O. Box 1306 • Phone (505) 746-6611  
Artesia, New Mexico 88210

## PRODUCT INFORMATION

### CI-119 Corrosion Inhibitor

"Cor-Trol"

#### DESCRIPTION

CI-119 is an oil soluble, water dispersible corrosion inhibitor formulated from an oil soluble complex amide and an oxalkylation of a complex amine.

CI-119 has excellent mobility in both phases of the producing system and exhibits excellent film persistency. It is formulated for use as a general purpose inhibitor which can be applied by chemical injection truck or conventional lubricator.

#### TYPICAL PHYSICAL PROPERTIES

FORM	Liquid
DENSITY @ 60°F (lb/gal)	7.85
POUR POINT	Below 0°F
FLASH POINT	Above 140°F
SOLUBILITY	Oil soluble; water dispersible

#### APPLICATION METHOD

CI-119 may be applied by chemical injection truck in which case it should be dispersed in fresh water or crude oil in a ration of 1 part chemical, 40 parts fluid and overflushed with one or more bbl water or oil. The overflushing is not mandatory; however, will insure inhibitor reaches bottom.

Application by means of a conventional lubricator is also very effective if followed by circulation and flushing with one or more bbl of produced fluid down the casing annulus. Dosage amounts and frequency of treatment are determined by individual well characteristics. All the possible variables cannot be covered in this product description.



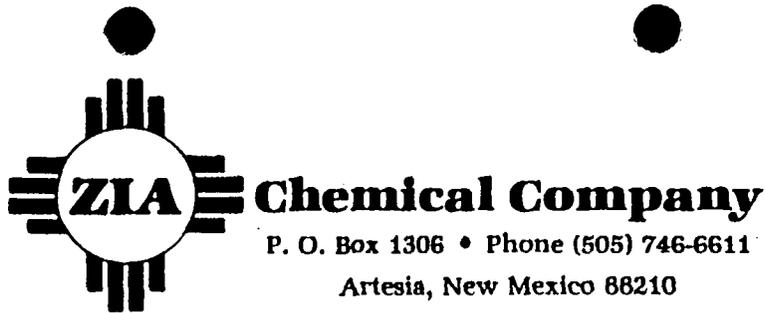
**Chemical Company**

P. O. Box 1306 • Phone (505) 746-6611

Artesia, New Mexico 88210

HANDLING PRECAUTIONS

CI-119 is non-toxic and is not considered dangerous. However, reasonable precautions should be taken to avoid physical contact. Skin irritations may result from prolonged exposure. Rinse affected areas with fresh water and wash with soap and water.



MATERIAL SAFETY DATA SHEET

Zia Code:     Cor-Trol-2 Corrossion Inhibitor

Chemical Name: Not applicable; Blend

OSHA: Component

Irritant: Strong oxidizing agents, plus alkalines and Fatty Acids.

First Aid and Nature of Hazard.

Eye Contact:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.  
Irritating, but does not injure eye tissue.

Skin Contact:

Remove grossly contaminated clothing, and launder before reuse.

If irritation persists, seek medical attention. Low order of toxicity.

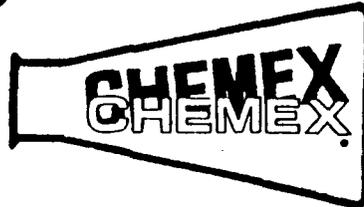
Frequent or prolonged contact may irritate and cause dermatitis.

Inhalation:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Ingestion:

First aid not normally required . Low order of toxicity.



PRODUCTION - CHEMICALS - DRILLING

H-1  
F-0  
R-0  
S-D

PRODUCT INFORMATION

TBC-2 Surfactant  
(AKA Surfac-10)

DESCRIPTION

Chemex TBC-2 surfactant is a non-ionic surface active agent. It is formulated for use in all oil field brines and fresh water. The product is compatible with both acid and caustic solution.

Oil coated and impregnated scale consisting of calcium carbonate, calcium sulfate, and iron sulfide are removed more effectively by the use of Sur-Fac 10 with an acid or caustic solution. Oil, suspended in the workover solution.

Demulsifiers incorporating Sur-Fac 10 in the formulation are most effective in water wetting iron sulfide particles.

TYPICAL PHYSICAL PROPERTIES

FORM	Liquid
DENSITY @ 60°F (lb/gal)	8.42
POUR POINT	15°F
SOLUBILITY	Water soluble; oil dispersible

Contains no arsenic, heavy metals, or organic chlorine compounds.

APPLICATION METHOD

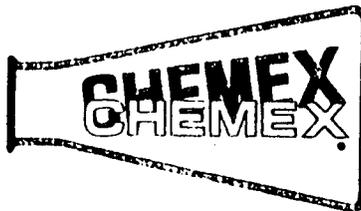
**INJECTION WELLS:** A controlled dosage of .5% -1.0% based upon the water injection rate for 5-30 minutes will emulsify heavy hydrocarbons filtered out at the formation face. If the well is making fluid on vacuum, it is a simple matter to bleed 1 or more gallons into a tee in the line to the well. Example:

Assumption: An injection well at the rate of 1 bbl/1 minute and a desired chemical dosage of .5% for 20 minutes.

Find: Gallons of chemical to be fed during a 20 minute "wash".  
Solution: 42 gal/min x .005 x 20 min. Answer: 4.2 gal.

**ACID OR CAUSTIC SOLUTIONS:** 1 to 2% concentration in an acid or caustic solution is adequate to improve the effectiveness of either chemical treatment.

PHONE  
505.746.6100



P. O. Box 423  
ARTESIA, NEW MEXICO  
88210

PRODUCTION - CHEMICALS - DRILLING

Sur-Fac 10 will dissolve in concentrated solution of electrolyte at low or high pH without degradation or loss of effectiveness.

KOBE SYSTEM: Sur-Fac 10 injected continuously at a rate of 1 gal/1000 bbl of power oil will help prevent pump sticking and it is recommended that fresh water be maintained on the bottom of the power oil tank into which 10 to 20 gallons of Sur-Fac 10 is added. Chloride levels would be checked periodically and fresh water added as needed.

#### HANDLING PRECAUTIONS

Sur-Fac 10 is a surfactant that is non-toxic and requires no special handling precautions.



**ZIA Chemical Company**

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Artesia, New Mexico 88210

MATERIAL SAFETY DATA SHEET

Zia Code TBC-2

Chemical Name: Not applicable, Blend

OSHA: Component

Irritant: Primary skin irritant and defatting agent.  
Nonionic surfactant/detergent.

First Aid and Nature of Hazard

Eye Contact:

Flush with large amounts of water until irritation subsides. If persists, seek medical attention. May cause reddening and conjunctivites.

SKIN CONTACT:

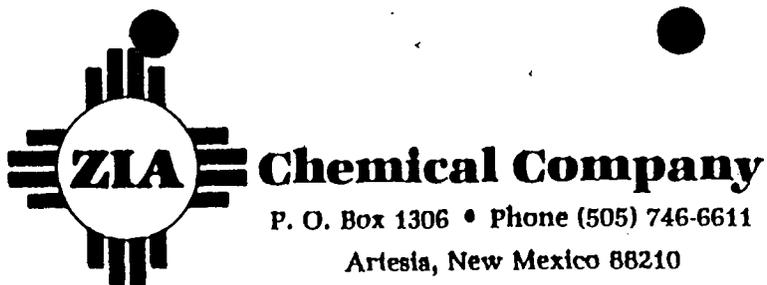
Remove grossly contaminated clothing and launder before reusing.

INHALATION:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

INJECTION:

Ingestion of this material may result in toxic effects.



H-2  
F-4  
R-0  
S-□

### PRODUCT INFORMATION

#### Paratrol X-10 Paraffin Solvent

#### DESCRIPTION

Paratrol X-10 contains a combination of ingredients which have proven to be the most effective broad spectrum paraffin solvent in the oil producing industry. Paratrol will dissolve both microcrystalline wax and asphalt-base heavy hydrocarbons.

#### TYPICAL PHYSICAL PROPERTIES

FORM.	Liquid
DENSITY @ 60°F (lb/gal)	9.21
FLASH POINT	Below 50°F
POUR POINT	-20°F
SOLUBILITY	Oil soluble, water insoluble

Contains no arsenic compounds or chlorinated hydrocarbons.

#### APPLICATION METHODS

Generally, paraffin solvents are best applied by periodic batch treatment and Paratrol X-10 is no exception. In pumping wells, five or ten gallons poured into the tubing head and allowed to soak overnight will often facilitate pulling the rods out.

Flow lines are treated with lubricators near the well. Dosage and frequency of treatment vary widely according to the rate of oil production and severity of the condition.

Continuous injection of Paratrol X-10 into flow lines has been reported to be very successful for paraffin control.

Another method of paraffin control is the use of PI-1200 Paraffin Inhibitor when conditions are suitable for the application of this product. Refer to the product information sheet on PI-1200 in this manual for further details.

#### HANDLING PRECAUTIONS:

**WARNING!!** Care should be exercised to prevent vapor exposure to sparks



**Chemical Company**

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Artesia, New Mexico 88210

or flame. Store in a ventilated area away from engines, electric motors, and open flames.



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MATERIAL SAFETY DATA SHEET

Zia Code: Paratrol X-10

Chemical Name: Not Applicable, Blend

Osha: Component

Physical Data: Boiling Point 115.8 C - 240 F  
Percent Volatiles By Volume - 100  
Freezing Point - 83.5 C - -118 F  
Flash Point - Below 75 F  
Soluability - Oil Soluable  
Water Dispersible

Fire & Explosion Hazard Data:

Avoid heat, open flame, sparks, and contact with strong oxidizing agents.

Extinguishing Media: Use CO<sup>2</sup> or dry chemical for small fires; alcohol-type aqueous film-forming foam for large fires.

Special Fire Fighting Procedures:

Do not enter any enclosed or confined fire space without protective equipment. This may include self contained breathing apparatus.

Emergency & First Aid Procedures:

Eye Contact:

Flush eyes with water for at least 15 minutes. Contact physican.

Skin Contact:

Remove contaminated clothing. Flush skin with water. If irritation persists contact a physican. Do not reuse clothing until cleaned.

Inhalation:

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artifical resperation if not breathing. Get mdeical attention.

Ingestion:

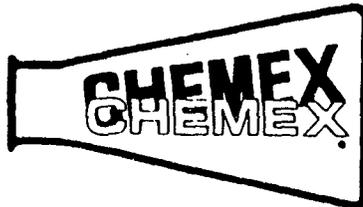
Induce vomiting of conscious victim immediately by giving no more than two glasses of water and touching finger to back of victims throat. Seek medical attention.

Reactivity:

Stability - Stable

Hazardous Polymerization - Will Not Occur

PHONE  
505.746.6100



P. O. Box 423  
ARTESIA, NEW MEXICO  
88210

PRODUCTION - CHEMICALS - DRILLING

PRODUCT INFORMATION

Chemex Super Foamer-A

*WASH DOWN SOAP*

DESCRIPTION

*WASH DOWN SOAP*

Chemex Super Foamer-A is a unique foamer having highly superior qualities in forming thick, stable foam which resist the ordinary destructive effects of chlorides, clays and other contaminants present in an air or gas system.

TYPICAL PHYSICAL PROPERTIES

APPEARANCE	Liquid
ODOR	Mild
COLOR VCS	2-4
TOTAL SOLIDS	60 - 63
NON-IONIC-%	Less than 3
pH	7
POUNDS PER GAL	8.5
FLASH POINT (COC), °F	174

CHEMICAL COMPOSITION:

Ammonium Salt of Sulfated Linear Alcohol Ethoxylate

SUGGESTED USES

Chemex Super Foamer-A is readily and completely biodegradable possesses high foaming properties in both soft and hard water, is an excellent emulsifier and detergent and is highly suitable for a wide variety of household and industrial uses. Primarily Chemex Super Foamer-A was designed to be used as a foamer for air drilling.

HANDLING PRECAUTIONS

This material is non-toxic and is not considered dangerous to handle.

H-1  
F-0  
R-0  
S-D



**Chemical Company**

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**MATERIAL SAFETY DATA SHEET**

Zia Code: De-Trol, <sup>WASH DOWN</sup> ~~SOAP~~ , Degreaser

Chemical Name: Not applicable, Blend

OSHA: Component

Irritant: Oxyalkylated Phenol, Sulfanic Acid Salt Solution

**First Aid and Nature of Hazard**

Eye Contact:

In case of eye contact, flush with copious amounts of clean water with eyelids open. If irritation persists, seek medical attention.

Skin Contact:

Remove grossly contaminated clothing wash skin with mild soap/water. Launder clothing before reuse.

Inhalation:

Vapors which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Ingestion:

Ingestion of this material may result in toxic effects.



# Frac Tech

A Division of Plainsman Technology Inc.

CLAYTROL

March 26, 1992

Revised March 31, 1994

## KCL Substitute, temporary clay control

Product Class: Organic replacement for KCL, temporary control of swelling clays.

### Description:

Claytrol is a low molecular weight organic cation chloride in water. Claytrol is a highly concentrated product, designed to replace KCl in formation treatments and workovers. Claytrol is a high efficiency temporary stabilizer for smectite, illite and mixed layer clay minerals encountered in many reservoirs. Claytrol is not surface active and will not upset NE packages. Claytrol is less damaging to low permeability rock than most other KCL substitutes and permanent clay stabilizers.

### Physical Properties: Typical

Physical state	liquid
Specific gravity @ 60F(15C)	1.107
Density, lb <sub>m</sub> /gal(g/cm <sup>3</sup> ) @ 60F(15C)	9.24(1.107)
Pour point, F(C)	<5(-15)
Flash point, F(C)	> 200(93)
Boiling point, F(C)	>212(100)
Viscosity, cP @ F(C)	2.3 @ 77(25)

### Chemical Properties: Typical

Chemical type	organic cation in water
Ionic character	not surface active
Odor	mild amine
Color	colorless to pale yellow, clear
Shelf-life	> 2 year
Wetting tendency on sand	not surface active
on limestone	not surface active
Compatibility -	No known compatibility problems with other typical additives or treating fluid systems, surfactants, gelling agents, crosslinkers. Items from the Frac Tech product line have been tested.
Incompatibility -	No known incompatibilities

### Mixing Procedure:

Claytrol can be run on-the-fly or be batch mixed. The recommended procedure is to add the Claytrol to the fluid prior to any other additives.

## Technical Data

Technical Limitation:

- Claytrol is highly concentrated but highly cost effective.

Job Design Data:

Recommended loading is ¼ to 2 gal per 1000 of fresh water, depending on mineralogy of the formation. At this loading Claytrol will mimic KCl in terms of the swelling and sloughing of clay minerals in the reservoir rock.

Comparative Performance Data:

Performance of KCl substitutes can be determined by their effect on the permeability of porous media. The procedure accompanying this report was used to evaluate several commonly available materials. The results of those tests are reported below.

Although KCl has obvious advantages, as seen in the data, the organic temporary clay control products have many operational, environmental and technical pluses. Claytrol, as can be seen, is as good as or better than the other commercial agents.

KCl Substitute	Loading gal/kegal	Flow Rates		Treated Water Flow @ 30 cm <sup>2</sup> /min	Fresh Water Shut-off, %	Capillary Suction Time, sec
		Treated water % brine	Regained brine % initial			
desired range -		>30	>40	<10	>50	>400 specific
2% KCl	2%	144%	80%	1.63	83%	600 standard
NH <sub>4</sub> Cl slurry	5	52%	37%	2.15	65%	384
Cla-Sta 2	5	30%	16%	9.28	23%	
BIO - 31	5	9%	8%	18.33	42%	129
AY - 80	5	12%	22%	13.18	20%	14
SP - 292	5	20%	42%	13.62	7%	14
TMAC (33%)	5	29%	35%	6.62	70%	492
TMAC (50%)	2	39%	42%	5.0	63%	999
ETMAC (33%)	5	30%	23%	10.15	74%	
diquat	5	7%	12%	26.97	17%	699
Claytrol	2	86%	49%	1.7	61%	993
Claytrol	2.5	39%	28%	5.9	61%	813
Claytrol	5	43%	46%	5.3	75%	388
Claytrol	10	88%	80%	1.2	78%	115

Safety: Refer to the Material Safety Data Sheet (MSDS).

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P.O. Box 557  
Marlow, OK 73055  
(405)658-6608

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## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

## SECTION I - IDENTIFICATION

COMPANY NAME..... FRAC TECH DIVISION, PLAINSMAN TECHNOLOGY, INC.  
 P.O. BOX 557  
 MARLOW, OK 73055  
 (405)658-6608

EMERGENCY PHONE NUMBER... DOMESTIC (800)732-9876  
 INTERNATIONAL (817)877-4020

EFFECTIVE DATE..... January 31, 1991  
 REVISED DATE..... January 17, 1995

CHEMICAL NAME..... KCl Substitute  
 TRADE NAME..... CLAYTROL-TCS(TM)  
 CHEMICAL FAMILY..... Quaternary ammonium compound  
 CHEMICAL FORMULA..... C<sub>5</sub>H<sub>14</sub>ClNO.H<sub>2</sub>O

## SECTION II - COMPONENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	PEL/TLV	CAS #
None	N/A	N/A	N/A

## SECTION III - PHYSICAL DATA

BOILING Point(F)..... >212°F (100°C)  
 FREEZING POINT (F)..... Less than 0°F  
 VOLATILITY/VOL(%)..... N/A  
 MELTING POINT..... Information not available  
 VAPOR PRESSURE (mm Hg)... Information not available  
 VAPOR DENSITY (Air=1)... Information not available  
 SOLUBILITY IN H<sub>2</sub>O..... Completely soluble in water  
 APPEARANCE/ODOR..... Colorless to pale yellow, amine odor  
 SPECIFIC GRAVITY (H<sub>2</sub>O=1). 1.06  
 EVAPORATION RATE..... Information not available  
 PH..... 6.5 - 8.0

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... >200°F (93°C)  
 LOWER FLAME LIMIT..... N/A  
 HIGHER FLAME LIMIT..... N/A

EXTINGUISH MEDIA..... In case of fire use water spray, "alcohol" foam, dry chemical or CO<sub>2</sub> (carbon dioxide).

FOR FIRE..... Full protective equipment including NIOSH/MSHA approved positive pressure self-contained breathing apparatus should be worn. All protective equipment should be cleaned thoroughly after use.

UNUSUAL FIRE HAZARD..... None

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

## =====

## SECTION V - HEALTH HAZARD DATA

=====

THRESHOLD LIMIT VALUE.... None currently established

OVER EXPOSURE EFFECTS.... None known

FIRST AID PROCEDURES..... EYES: Flush eyes with copious quantities of water for a minimum of fifteen minutes. Use fingers to ensure that eyelids are separated and that eye is being irrigated. If irritation persists consult a physician.

SKIN: Wash thoroughly with soap and water.

INHALATION: Remove from source of exposure.

=====

## =====

## SECTION VI - REACTIVITY DATA

=====

CHEMICAL STABILITY..... Stable

CONDITIONS TO AVOID..... None known

COMPATIBLE MATERIALS... None known.

DECOMPOSITION PRODUCTS... Combustion may produce carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION. Will not occur.

POLYMERIZATION AVOID..... None

=====

## =====

## SECTION VII - SPILL OR LEAK PROCEDURE

=====

FOR SPILL ..... If material spill occurs, absorbent materials should be used to prevent runoff from entering drains, sewers or streams. Waste residue should be collected and placed in a closed container for waste disposal.

WASTE DISPOSAL METHOD.... Dispose of any residues or wastes according to prescribed statutes, regulations and guidelines, e.g., secured chemical landfill, approved chemical wastes incineration or approved (low level) discharges to municipal or on-site wastewater treatment facilities.

=====

## =====

## SECTION VIII - SPECIAL PROTECTION

=====

RESPIRATORY PROTECTION... OSHA and ACGIH have not established specific exposure limits.

VENTILATION..... Local exhaust ventilation and/or process containment may be used to minimize worker exposure to organic vapors that may be given off.

PROTECTIVE GLOVES..... None normally required.

EYE PROTECTION..... Safety glasses and/or chemical safety goggles should be worn. The choice of protection should be appropriate to the task being performed.

=====

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

## OTHER PROTECTIVE

EQUIPMENT..... Washing facilities should be available. Wash thoroughly after handling.

HANDLING AND STORAGE..... Containers need no special warning labels in addition to the product identity label.

 =====  
 SECTION IX - SPECIAL PRECAUTIONS  
 =====

HAZARD CLASS..... None  
 DOT SHIPPING NAME..... Not Regulated  
 REPORTABLE QUANTITY (RQ). N/A  
 UN NUMBER..... N/A  
 NA #..... N/A  
 PACKAGING SIZE..... 55 gallons

FOOT NOTES Sara Title III (Superfund Amendments & Reauthorization Act of 1986)  
 - Sections 302, 311, 312 and 313:

Section 302 - Extremely Hazardous Substances (40CFR355): This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

Sections 311 & 312 - Material Safety Data Sheet Requirements (40CFR370): Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

  n/a   Immediate (acute) health hazard  
  n/a   Delayed (chronic) health hazard  
  n/a   Fire hazard  
  n/a   Sudden release of pressure hazard  
  n/a   Reactive hazard

Under Section 311, submittal of MSDS's or a list of product names to the local emergency planning commission, state emergency response commission & local fire department is required after October 17, 1989 for all hazardous substances.

Section 313 - List of Toxic Chemicals (40CFR372): This product contains the following ingredients, (with CAS# and % range) which appears on the List of Toxic Chemicals: None.

## REFERENCES

## MATERIAL SAFETY DATA SHEET

CLAYTROL-TCS(TM)

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# MINERAL SPIRITS

350 LBS NET  
159 KG NET

CONTAINS PETROLEUM DISTILLATES

## CAUTION!

COMBUSTIBLE LIQUID AND VAPOR.  
MAY CAUSE EYE AND SKIN IRRITATION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION.  
MAY BE HARMFUL IF INHALED  
MAY BE HARMFUL IF SWALLOWED.  
MAY CAUSE DIZZINESS AND DROWSINESS  
ASPIRATION MAY CAUSE LUNG DAMAGE.

BEFORE USING THIS PRODUCT, READ  
THE MATERIAL SAFETY DATA SHEET

KEEP AWAY FROM HEAT AND FLAME  
AVOID CONTACT WITH EYES, SKIN AND CLOTHING  
KEEP CONTAINER CLOSED  
USE WITH ADEQUATE VENTILATION  
WASH THOROUGHLY AFTER HANDLING  
DO NOT TRANSFER TO UNLABELED CONTAINERS

## SPILLS OR LEAKS:

ELIMINATE ALL SOURCES OF IGNITION.  
**SMALL SPILL** — SOAK UP WITH ABSORBENT MATERIAL AND SCOOP INTO DRUMS.  
**LARGE SPILL** — DIKE AND PUMP INTO DRUMS, PREVENT MATERIAL FROM ENTERING DRAINS, SEWERS, OR WATERWAYS.  
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.  
FOR HELP IN A CHEMICAL EMERGENCY, CALL CHEMTREC — (800) 424-9300.

## FOR INDUSTRIAL USE ONLY

**CHEMCENTRAL**

ODESSA  
105 PRONTO  
ODESSA, TX. 79760  
915-367-6087

DECEMBER 1999

## FIRST AID:

IN CASE OF CONTACT FOR EYES, IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. CALL A PHYSICIAN. FOR SKIN, FLUSH WITH WATER. WASH CLOTHING BEFORE REUSE.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

IF SWALLOWED CALL A PHYSICIAN IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

## IN CASE OF FIRE:

USE FOAM, CARBONDIOXIDE, DRY CHEMICAL, OR WATER FOG OR SPRAY.



## DANGER

AFTER THIS CONTAINER HAS BEEN EMPTIED IT MAY CONTAIN EXPLOSIVE AND HARMFUL VAPORS AND RESIDUE. KEEP AWAY FROM HEAT, SPARKS, AND FLAMES! DO NOT CUT, PUNCTURE, OR WELD ON OR NEAR THIS CONTAINER.  
DO NOT RE-USE CONTAINER FOR ANY PURPOSE UNTIL COMMERCIALY CLEANED.



NAVA REFINING COMPANY  
P. O. BOX 159  
ARTESIA, NM 88211-0159  
(505) 748-3311, (505) 365-8364, (505) 365-8365 (24 Hours)

# MATERIAL SAFETY DATA SHEET

## EMERGENCY PHONE NUMBERS:

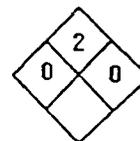
CHEMTREC: 1-800-424-9300 (for fire, spill and emergency response information)  
NEW MEXICO POISON INFORMATION CENTER: 1-800-432-6866 (for poisoning)  
TEXAS (EL PASO) POISON INFORMATION CENTER: (915) 533-1244 (for poisoning)  
ARIZONA POISON INFORMATION CENTER: 1-800-362-0101 or (602) 253-3334 (for poisoning)

## KEROSENE

### SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: KEROSENE  
FORMULA:  $C_9H_{20}$  to  $C_{16}H_{34}$   
SYNONYMS: Fuel oil #1, coal oil, range oil, kerosine  
UN 1223

CAS NUMBER: 8008-20-6  
CHEMICAL FAMILY: Petroleum  
Hydrocarbon



NFPA 704 SYMBOL

### SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS	CAS NO.	VOL%	TLV	STEL	PEL (OSHA)	IDLH
KEROSENE (containing)	8008-20-6	>95	NA	NA	NA	NA
Napthalene	91-20-3	1	10 ppm	15 ppm	10 ppm	500 pp

### SECTION 3 - PHYSICAL DATA

BOILING POINT: 300-575°F  
VAPOR PRESSURE: @100°F 5 mm Hg  
VAPOR DENSITY (AIR=1): 4.5  
SOLUBILITY IN WATER: Insoluble  
ODOR THRESHOLD: 1.0 ppm  
APPEARANCE AND ODOR: Clear to yellow liquid with characteristic hydrocarbon smell

SPECIFIC GRAVITY (WATER=1): 0.8  
% VOLATILE BY VOLUME: N.A.  
EVAPORATION RATE: No data available  
AUTOIGNITION TEMP: 444°F

### SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

CLASSIFICATION: CLASS II, COMBUSTIBLE LIQUID  
FLASH POINT: 110-165°F (TOC)  
FLAMMABLE LIMITS: LEL = 0.7% UEL = 5.0%  
EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, Halon  
SPECIAL FIRE FIGHTING PROCEDURES: Move container from fire area if possible. Use water to keep fire exposed containers cool. Use foam for spill control.  
UNUSUAL FIRE AND EXPLOSION HAZARDS: Evacuate a radius of 1500 feet for uncontrolled fires. Vapors are heavier than air and may travel great distances and flash back. Extinguish only if flow can be stopped.

NFPA FIRE = 2 (moderate)

KEROSENE

SECTION 5 - REACTIVITY DATA

STABILITY: Stable  
HAZARDOUS POLYMERIZATION: Will not occur  
CONDITIONS TO AVOID/INCOMPATIBILITY: Strong oxidizers  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide  
NFPA REACTIVITY = 0 (minimal)

SECTION 6 - HEALTH HAZARD DATA

ROUTES OF ENTRY: Inhalation, ingestion, skin contact.  
HEALTH HAZARDS: Chronic toxicity, possible cancer, irritation to eyes, skin and mucous membranes, pulmonary edema, bronchial pneumonia, asphyxiation, liver and kidney damage, anemia or myocardial damage.  
CARCINOGENICITY: Product is not listed by NTP or IARC.  
SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of eyes, skin and mucous membranes, dizziness, headaches, respiratory arrest, coughing, irregular heartbeat, mental confusion, vomiting, blurred vision, flushing of face, slurred speech, difficulty in swallowing, weakness, pain in limbs, coma and convulsions. Also, insomnia, toxicity, psychosis, tremors, exaggerated tendon reflexes  
EMERGENCY AND FIRST AID PROCEDURES:  
INGESTION: DO NOT induce vomiting. Immediately seek medical attention. Give water to dilute, if conscious.  
INHALATION: Maintain respirations, assist with artificial respiration if needed and give oxygen if available and trained to do so. Seek medical attention. If liquid is in lungs (aspirated) seek medical care.  
EYES: Flush eyes with water for at least 15 minutes. Seek medical attention.  
SKIN: Remove kerosene soaked clothing. Wash skin with soap and water. If irritation persists seek medical attention.

NFPA HEALTH = 0 (minimal)

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate all sources of ignition. Contain spill. Use water fog to suppress vapor cloud. Use SCBA to avoid breathing vapors. Absorb liquid with sand or clay.  
WASTE DISPOSAL: Dispose in accordance with RCRA regulations. Do not put in sewers or any water course.  
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: All equipment and storage containers should be properly grounded. This material is subject to OSHA and DOT regulations. Portable metal containers should be bonded to the storage container before transferring liquid.  
OTHER PRECAUTIONS: Avoid breathing vapors. Extremely flammable. Do not weld on containers unless properly cleaned and purged using safe work procedures.

## SECTION 8 - ENVIRONMENTAL AND SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Use NIOSH\MSHA approved respiratory protection in areas exceeding exposure limits, the type to be determined by the degree of exposure.

VENTILATION: Use in well ventilated area. Mechanical exhaust should be explosion proof.

EYE/SKIN PROTECTION: Rubber gloves, face shields, goggles or safety glasses with side shields, coveralls.

WORK/HYGIENIC PRACTICES: Remove contaminated clothing as soon as possible. Always wash after handling hazardous chemicals.

NOTICE: This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

REFER TO DEPARTMENT OF TRANSPORTATION (DOT) EMERGENCY RESPONSE GUIDEBOOK GUIDE 27 FOR ADDITIONAL EMERGENCY INFORMATION.

This information is believed to be accurate and as reliable as information available to us. We make no warranty or guarantee as to its accuracy and assume no liability from its use. Users should determine the suitability of the information for their particular purposes.

**MATERIAL SAFETY DATA SHEET**

**BASF CORPORATION  
100 CHERRY HILL RD.**

**PARSIPPANY, NJ 07054  
(201) 316-3000**

**Original Date: 10/15/1991  
Revision Date: 03/31/1992**

**Emergency Telephone: (800) 424-9300 (CHEMTREC)  
(800) 832-HELP (BASF Hotline)**

*BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.*

**SECTION 1 - PRODUCT INFORMATION**

**Product ID: NVS 583870  
NAPA ANTIFREEZE**

**Common Chemical Name:  
INHIBITED ETHYLENE GLYCOL**

**Synonyms:  
ANTIFREEZE**

**Molecular Formula:  
MIXTURE**

**Molecular Wt.: NOT APPLICABLE  
Chemical Family: Glycol**

**SECTION 2 - INGREDIENTS**

Chemical Name:	CAS #:	Amount:	PEL/TLV Data:
ETHYLENE GLYCOL HC	107-21-1	85.0 - 95.0 %	OSHA CEIL 50 PPM FINAL
DIETHYLENE GLYCOL H	111-46-6	0.0 - 10.0 %	NOT ESTABLISHED

I - Denotes an IARC listed carcinogen  
 N - Denotes an NTP listed carcinogen  
 O - Denotes an OSHA carcinogen  
 H - Denotes an OSHA health hazard  
 P - Denotes an OSHA physical hazard  
 C - Denotes a CERCLA listed chemical

See section 10A for SARA-315 list.

**\*P66X**

*ale3*

Product ID: NVS 583870  
 NAPA ANTIFREEZE

Page 2

## SECTION 3 - PHYSICAL PROPERTIES

Color: Green  
 Form/Appearance: Liquid  
 Odor: Glycol  
 Odor Intensity: Faint

	Typical	Low-RANGE-High	U. O. M.
Spc. Gravity:	1.135		
pH:		9 - 11	SU

	Typical	Low-RANGE-High	Deg.	@ Pressure
Boiling Pt:	330		F	760 MM HG
Freezing Pt:	NOT AVAILABLE			
Decomp. Tmp:	NOT AVAILABLE			

Solubility in Water Description: Infinite

Vapor Pressure:	18	MM HG	@	20	DEG. C
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## SECTION 4 - FIRE AND EXPLOSION DATA

	Typical	Low-RANGE-High	Deg.	Method
Flash Point:	250		F	CLEVELAND OPEN CUP
Autoignition:	775		F	NONE SPECIFIED

**Extinguishing Media:**

Water fog, alcohol foam, CO2 or dry chemical extinguishing media.

**Fire Fighting Procedures:**

Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Avoid breathing vapors or fumes of heated product or burning product.

**Unusual Hazards:**

Vapors from heated (above flashpoint) of product may travel to a source of ignition and flash back.

Product ID: NVS 583870  
NAPA ANTIFREEZE

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## SECTION 5 - HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gasses include inhalation and eye and skin contact.

### Acute Overexposure Effects:

Contact with the eyes and skin may result in irritation. Acute overexposure to diethylene glycol and ethylene glycol can cause severe abdominal distress, CNS depression, possibly respiratory and/or kidney failure.

### Chronic Overexposure Effects:

Chronic overexposure to diethylene glycol and ethylene glycol can cause liver and kidney damage. Animal studies indicate that ethylene glycol may be embryotoxic and teratogenic by the oral and inhalation routes.

### First Aid Procedures - Skin:

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, get medical attention.

### First Aid Procedures - Eyes:

Immediately wash eyes with running water for 15 minutes. If irritation develops, get medical attention.

### First Aid Procedures - Ingestion:

If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

### First Aid Procedures - Inhalation:

Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

### First Aid Procedures - Notes to Physicians:

Administration of ethanol may counteract the effects of ethylene glycol, such as metabolic acidosis and renal damage.

### First Aid Procedures - Aggravated Medical Conditions:

Individuals with preexisting diseases of the skin, respiratory disorders, or impaired function of the liver/kidneys may have

Product ID: NVS 583870  
**NAPA ANTIFREEZE**

Page 4

**SECTION 5 - HEALTH EFFECTS (Cont.)**

increased susceptibility to excessive exposures.

**First Aid Procedures - Special Precautions:**  
None

**SECTION 6 - REACTIVITY DATA**

**Reactivity - Stability Data:**  
Stable

**Reactivity - Incompatibility:**  
No data available.

**Reactivity - Conditions/Hazards to Avoid:**  
No data available.

**Reactivity - Hazardous Decomposition/Polymerization:**  
Hazardous Decomposition Products: No Data Available.  
Polymerization: Does not occur.

**Reactivity - Corrosive Properties:**  
Not corrosive.

**Reactivity - Oxidizer Properties:**  
Not an oxidizer

**SECTION 7 - PERSONAL PROTECTION**

**Personal Protection - Clothing:**  
Gloves, coveralls, apron, boots as necessary to minimize contact.

**Personal Protection - Eyes:**  
Chemical goggles; also wear a face shield if splashing hazard exists.

Product ID: NVS 583870

Page 5

NAPA ANTIFREEZE

**SECTION 7 - PERSONAL PROTECTION (Cont.)****Personal Protection - Respiration:**

If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor/mist respirator.

**Personal Protection - Ventilation:**

Use local exhaust to control to recommended P.E.L.

**Personal Protection - Explosion Proofing:**

None required.

**SECTION 8 - SPILL-LEAK/ENVIRONMENTAL****Spill/Leak Procedures - General:**

Spills should be contained, solidified and placed in suitable containers for disposal in a licensed facility. This material is regulated by CERCLA ("Superfund").

This material is a CERCLA hazardous substance (ethylene glycol having an RQ of 1 lb). Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush area with water.

**Spill/Leak Procedures - Waste Disposal:**

Incinerate or bury in a RCRA licensed facility. Do not discharge into waterways or sewer systems without proper authority.

**Spill/Leak Procedures - Container Disposal:**

Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.

**SECTION 9 - STORAGE AND HANDLING****Storage and Handling - General:**

No special requirements needed.

Product ID: NVS 583870  
NAPA ANTIFREEZE

**SECTION 10A - FEDERAL REGULATORY INFORMATION**

TSCA Inventory Status  
Listed on Inventory: YES

RCRA Haz. Waste No.:  
CERCLA: YES Reportable Qty.: (If YES) 1 LB

**SECTION 10B - STATE REGULATORY INFORMATION**

State Regulatory Information: (By Component)	NJ/PA/MA RTK
CAS #: 107-21-1 NAME: ETHYLENE GLYCOL	YES
CAS #: 111-46-6 NAME: DIETHYLENE GLYCOL	YES
CAS #: 7758-11-4 NAME: PHOSPHORIC ACID, DIPOTASS	NO

Product ID: NVS 583870  
**NAPA ANTIFREEZE**

**SECTION 11 - TRANSPORTATION INFORMATION**

DOT Proper Shipping Name:

NONE

DOT Technical Name:

NONE

DOT Primary Hazard Class:

NONE

DOT Secondary Hazard Class:

DOT Label Required:

NONE

DOT Placard Required:

NONE

DOT Poison Constituent:

**BASF** Commodity Codes: 332 332 UN/NA Code: N/A E/R Guide: N/A

Bill of Lading Description:

ANTIFREEZE PREPARATIONS, PROPRIETARY, ETHYLENE GLYCOL BASE

	CLASS:	P. G.	SHIPPING NAME:
IATA:	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE
IMO:	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE
TDG:	NONE	N/A	ANTIFREEZE PREPARATIONS, PROPRIETARY, ET COL BASE

Product ID: NVS 583870

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**NAPA ANTIFREEZE**

SECTION 12 - MANUFACTURER'S INFORMATION

® is a registered trademark of **BASF Corporation**.

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WHILE BASF CORPORATION BELIEVES THE DATA SET FORTH HEREIN ARE ACCURATE AS THE DATE HEREOF, BASF CORPORATION MAKES NO WARRANTY WITH RESPECT THERETO AND EXPRESSINGLY DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. SUCH DATA ARE OFFERED SOLELY FOR CONSIDERATION, INVESTIGATION, AND VERIFICATION.

END OF DATA SHEET



MOTC0090

Revised 28-OCT-1994

Printed 16-NOV-1994

## FLEET HEAVY DUTY MOTOR OIL

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### # Tradenames and Synonyms

Product Codes:

6210/6211/6220/6230/6240/6244/  
6245/6250/6260/6261/6265

Grades:

HD 10W, 20W-20, 30, 40, 50;  
HD Supreme 10W-30, 15W-40;  
10 TBN 15W-40, 30, 40;  
LP

#### Company Identification

MANUFACTURER/DISTRIBUTOR  
CONOCO INC.  
P.O. BOX 2197  
HOUSTON, TX 77252

#### PHONE NUMBERS

Product Information	1-713-293-5550
Transport Emergency	CHEMTREC 1-800-424-9300
Medical Emergency	1-800-441-3637

### COMPOSITION/INFORMATION ON INGREDIENTS

#### # Components

Material	CAS Number	%
May contain any combination of the following		60-90
base oils:		
Solvent Refined Dist., Hvy. Paraffinic	64741-88-4	
Solvent Refined Dist., Lt. Paraffinic	64741-89-5	
Solvent Dewaxed Dist., Hvy. Paraffinic	64742-65-0	
Hydrotreated Dist., Hvy. Paraffinic	64742-54-7	
Solvent Refined Residuum	64742-01-4	

(Continued)

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**COMPOSITION/INFORMATION ON INGREDIENTS**(Continued)

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Solvent Dewaxed Residual Oil	64742-62-7	
Hydrotreated Bottoms	64742-57-0	
Ethylene/Propylene Copolymer	9010-79-1	0-20
Zinc Compounds	68649-42-3	1-3
Metal Sulfonates		0-11
Proprietary Additives		0-25

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If oil mist is generated, exposure limits apply.

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**HAZARDS IDENTIFICATION****Potential Health Effects****Substance Information**

Primary Routes of Entry: Skin, inhalation

The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects.

Manufacturers have not seen allergic reactions to metal sulfonates in workers based on over 40 years of experience. Thus, metal sulfonates would not seem to be a significant health hazard.

Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper personal protective equipment and sufficient ventilation can provide adequate protection.

**"USED" Motor Oil -**

There are no epidemiology studies showing "used" motor oil to be carcinogenic. Health hazards to "used" motor oil can be minimized by avoiding prolonged skin contact.

**Carcinogenicity Information**

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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(Continued)

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## FIRST AID MEASURES

### First Aid INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### SKIN CONTACT

Wash thoroughly with soap and water after handling. If irritation develops, consult a physician.

### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

### INGESTION

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

### Notes to Physicians

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

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## FIRE FIGHTING MEASURES

### Flammable Properties

Flash Point	170 C (338 F) (Minimum)
Method	Pensky-Martens Closed Cup - PMCC.
Autoignition	650 F (343 C)

---

NFPA Classification            Class IIIB Combustible Liquid.

---

### Extinguishing Media

Water Spray, Foam, Dry Chemical, CO2.

---

### Fire Fighting Instructions

Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water may be used to flush spills away from exposures.

Products of combustion may contain carbon monoxide, carbon dioxide, and other toxic materials. Do not enter enclosed or confined space without proper protective equipment including respiratory protection.

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(Continued)

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## ACCIDENTAL RELEASE MEASURES

### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Remove source of heat, sparks, and flame.

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### Initial Containment

Dike spill. Prevent material from entering sewers, waterways, or low areas.

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### Spill Clean Up

Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material.

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## HANDLING AND STORAGE

### # Handling (Personnel)

Avoid breathing vapors or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

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### Handling (Physical Aspects)

Close container after each use. Do not pressurize, cut, weld, braze, solder, grind, or drill on or near full or empty container. Empty container retains residue (liquid and/or vapor) and may explode in heat of a fire.

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### Storage

Store in accordance with National Fire Protection Association recommendations. Store in a well ventilated place. Store in a cool, dry place. Store away from heat, sparks and flames, oxidizers.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

#### VENTILATION

Normal shop ventilation.

---

### Personal Protective Equipment

#### RESPIRATORY PROTECTION

None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Select appropriate NIOSH-approved respiratory protective equipment when exposed to sprays or mists. Proper respirator selection should be determined by adequately trained personnel and based on the contaminant(s), the degree of potential exposure, and published respirator protection factors.

#### PROTECTIVE GLOVES

Should be worn when the potential exists for prolonged or repeated skin contact. NBR or neoprene recommended.

(Continued)

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**EXPOSURE CONTROLS/PERSONAL PROTECTION**(Continued)**EYE PROTECTION**

Safety glasses with side shields.

**OTHER PROTECTIVE EQUIPMENT**

Coveralls with long sleeves if splashing is probable.

**OTHER PRECAUTIONS**

Avoid any prolonged or repeated skin contact with "used" motor oil. Wash thoroughly with soap and water after contact.

---

**Exposure Guidelines****Applicable Exposure Limits**

If oil mist is generated, exposure limits apply.

PEL (OSHA)	5 mg/m <sup>3</sup> , 8 Hr. TWA
TLV (ACGIH)	5 mg/m <sup>3</sup> , 8 Hr. TWA, STEL 10 mg/m <sup>3</sup>
	Notice of Intended Changes (1994-1995)
	5 mg/m <sup>3</sup> , 8 Hr. TWA, severely refined
AEL * (Du Pont)	5 mg/m <sup>3</sup> , 8 Hr. TWA

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\* AEL is Du Pont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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**PHYSICAL AND CHEMICAL PROPERTIES****Physical Data**

Boiling Point	>520-1200 F (271-649 C)
Vapor Pressure	Nil
Vapor Density	>1 (Air = 1)
% Volatiles	Nil
Evaporation Rate	Nil
Solubility in Water	Insoluble
Odor	Mild Petro. Hydrocarbon
Form	Liquid
Color	Dark Amber to Dark Brown
Specific Gravity	0.873-0.896 @ 60 F (16 C)
Density	7.27-7.47 lb/gal @ 60 F (16 C)

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**STABILITY AND REACTIVITY****Chemical Stability**

Stable at normal temperatures and storage conditions.

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**Conditions to Avoid**

Avoid heat, sparks, and flame.

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**Incompatibility with Other Materials**

Incompatible with strong oxidizing materials.

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**Decomposition**

Combustion forms oxides of carbon and may produce small quantities of oxides of nitrogen, phosphorus, sulfur, and zinc.

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**Polymerization**

Polymerization will not occur.

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(Continued)

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## **TOXICOLOGICAL INFORMATION**

### **Animal Data**

Mouse skin painting studies have shown that highly solvent-refined petroleum distillates similar to ingredients in this product have not caused skin tumors.

Animal skin exposure studies show high concentrations of zinc organic phosphates cause testicular atrophy, but this effect appears related to stress from the chemical causing severe skin irritation. Low concentrations of the zinc component, as occurs in lubricant products, would not have caused testicular damage.

### **"USED" Motor Oil -**

Laboratory studies with mice have shown that "Used" motor oil applied repeatedly to the skin caused skin cancer. In these studies, the "Used" motor oil was not removed between applications.

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## **ECOLOGICAL INFORMATION**

### **Ecotoxicological Information**

No specific aquatic data available for this product.

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## **DISPOSAL CONSIDERATIONS**

### **Waste Disposal**

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

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### **Container Disposal**

Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

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## **TRANSPORTATION INFORMATION**

### **Shipping Information**

DOT  
Not regulated.

ICAO/IMO  
Not restricted.

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(Continued)



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**REGULATORY INFORMATION**(Continued)**State Regulations (U.S.)****CALIFORNIA "PROP 65"**

This material is not known to contain any ingredient(s) subject to the Act.

**PENNSYLVANIA WORKER & COMMUNITY RIGHT TO KNOW ACT**

This material may contain the following ingredient(s) subject to the Pennsylvania and Community Right to Know Hazardous Substances List.

Ingredient Category	Zinc Compounds Environmental Hazard
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**Canadian Regulations**

This is not a WHMIS Controlled Product.

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**OTHER INFORMATION****NFPA, NPCA-HMIS**

NFPA Rating	
Health	0
Flammability	1
Reactivity	0

NPCA-HMIS Rating	
Health	1
Flammability	1
Reactivity	0

Personal Protection rating to be supplied by user depending on use conditions.

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS Address	MSDS Administrator Conoco Inc. PO Box 2197 Houston, TX 77252
Telephone	713/293-5550

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# Indicates updated section.

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End of MSDS

# MATERIAL SAFETY DATA SHEET



**Diamond Shamrock**  
Refining and Marketing  
Company

MSDS NUMBER: M7751

MSDS DATE: 06-23-87

PRODUCT NAME: #2 DIESEL FUEL

24 HOUR EMERGENCY PHONE: (512) 641-8800

## I. PRODUCT IDENTIFICATION

2 HEALTH, 2 FLAMMABILITY, 0 REACTIVITY & (Blank) INSTABILITY based on "Standard System for the Identification of the Fire Hazards of Materials, NFPA No. 704, 1985 Edition"

MANUFACTURER'S NAME AND ADDRESS: Diamond Shamrock Refining and Marketing Company, P.O. Box 696000, San Antonio, Texas 78269-6000

CHEMICAL NAME: Light hydrocarbon distillates CAS NUMBER: 68476-34-6

SYNONYMS/Common Names:

CHEMICAL FORMULA: C<sub>5</sub>-C<sub>16</sub> Hydrocarbons

DOT PROPER SHIPPING NAME: Diesel Fuel

DOT HAZARD CLASS: Combustible Liquid

DOT I.D. NUMBER: NA1993

HAZARDOUS SUBSTANCE: NA

## II. HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	HAZARD DATA	CAS NUMBER	%
Light hydrocarbon	PEL = None established	8008-20-6	100
Blend	TLV = None established (See Section V)	64741-44-2 64741-59-9	

NIOSH has proposed 100mg/m<sup>3</sup> 8hr TWA or ~14ppm 8hr TWA based on an average molecular weight of 170 for kerosene like fractions. The materials in this product are listed in the TSCA Inventory. Not listed as carcinogenic by IARC, NTP, OSHA, ACGIH.

## III. PHYSICAL DATA

BOILING POINT @ 760 mm Hg: 340-670°F VAPOR DENSITY (Air=1): N/A

EVAPORATION RATE (BuAc=1): N/A

MELTING POINT: NA

BULK DENSITY AT 20°C: 7.07 lbs/gal

% VOLATILES BY VOL.: 100

SOLUBILITY IN H<sub>2</sub>O % BY WT: Trace

SPECIFIC GRAVITY (H<sub>2</sub>O=1) 0.85 API Gravity = 35.0

APPEARANCE AND ODOR: Colorless liquid with aromatic odor; odor threshold ~1ppm and is not an index of exposure

pH: NA

Physical data may vary slightly to meet specifications.

CAS = Chemical Abstract Service Number  
PEL = OSHA Permissible Exposure Limit  
TLV = TLV\*, ACGIH Threshold Limit Value, Current

N/A = No relevant information found or not available  
NA = Not applicable

This Material Safety Data Sheet was prepared by Diamond Shamrock Refining and Marketing Company on behalf of the above manufacturer in accordance with 29 CFR 1910.1200. All information, recommendations and suggestions appearing herein concerning this product are based upon tests and data believed to be reliable, however, it is the user's responsibility to determine the safety, toxicity and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made by Diamond Shamrock as to the effects of such use the results to be obtained or the safety and toxicity of the product nor does Diamond Shamrock assume any liability arising out of use by others of the product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

#### IV. FIRE AND EXPLOSION DATA

FLASH POINT: 150°F AUTOIGNITION TEMPERATURE: N/A  
FLAMMABLE LIMITS IN AIR, % BY VOLUME- UPPER: 5 LOWER: 1  
EXTINGUISHING MEDIA: Dry chemical, foam or carbon dioxide or water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Pressure-demand, self-contained breathing apparatus should be provided for fire fighters in buildings or confined areas where product is stored.

UNUSUAL FIRE AND EXPLOSION HAZARD: Clothing, rags, or similar organic material contaminated with the product and stored in a closed space may undergo spontaneous combustion. Transfer product to and from commonly grounded containers.

#### V. HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA: The major effect of exposure to this product is central nervous system depression.

MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE:

Conditions which have the same symptoms or effects as stated below.

MEDICAL LIMITATION: N/A

##### ROUTES OF EXPOSURE

INHALATION: Irritation of the upper respiratory tract with central nervous system stimulation possibly followed by depression, dizziness, headache, incoordination, anesthesia, coma and respiratory arrest.

SKIN CONTACT: Defatting may occur with continued or prolonged contact. Irritation and burning sensation may occur on exposure to liquid vapor phase.

SKIN ABSORPTION: Not significant.

EYE CONTACT: Severe burning sensation with temporary irritation and swelling of lids.

INGESTION: Irritation of mucous membranes of throat, esophagus and stomach which may result in nausea and vomiting; depression may occur if absorbed. (See Inhalation above.)

##### EFFECTS OF OVEREXPOSURE

ACUTE: Central nervous system depression with extreme overexposure; effects may include anesthesia, coma, respiratory arrest, and irregular heart rate. Oxygen deprivation is possible if working in confined spaces.

CHRONIC: Experience has shown no major cumulative or latent effects to have resulted from exposure to this product. (See Health Hazard Data above.)

##### EMERGENCY AND FIRST AID PROCEDURES

EYES: Object is to flush material out then seek medical attention. Immediately flush eyes with large amounts of water for at least 15 minutes holding lids apart to ensure flushing of the entire eye surface. Seek medical attention.

SKIN: Wash contaminated areas with plenty of soap and water. A soothing ointment may be applied to irritated skin after thorough cleansing. Remove contaminated clothing and footwear. Seek medical attention if symptoms result.

INHALATION: Get person out of contaminated area to fresh air. If breathing has stopped, resuscitate and administer oxygen if readily available. SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep airway clear. SEEK MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN: Gastric lavage only if large quantity has been ingested. Guard against aspiration into lungs which may result in chemical Pneumonitis. Irregular heart beat may occur; use of Adrenalin is not advisable. Treat symptomatically.

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## VI. REACTIVITY DATA

**CONDITIONS CONTRIBUTING TO INSTABILITY:** Under normal conditions, the material is stable. Avoid sources of ignition such as flames, hot surfaces, electrical or functional sparks, etc.  
**INCOMPATIBILITY:** Avoid contact with strong oxidizers.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products may include carbon monoxide, carbon dioxide and other hydrocarbons.  
**CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:** Material is not known to polymerize.

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## VII. ENVIRONMENTAL PROCEDURES

**SPILLS OR RELEASES:** If material is spilled or released to the atmosphere, steps should be taken to contain liquids and prevent discharges to streams or sewer systems; and control or stop the loss of volatile materials to the atmosphere. Spills or releases should be reported, if required, to the appropriate local, state and federal regulatory agencies.  
**DISPOSAL:** Clean-up action should be carefully planned and executed. Shipment, storage, and/or disposal of waste materials are regulated and action to handle or dispose of spilled or released materials must meet all applicable local, state and federal rules and regulations. If any question exists, the appropriate agencies should be contacted to assure proper action being taken. Waste product and contaminated material will be considered a hazardous waste if the flash point is less than 140°F requiring disposal at an approved hazardous waste facility.  
**STORAGE:** Protect against physical damage. Outside or detached storage is preferred. Separate from oxidizing materials. Store in cool, well ventilated area of non-combustible construction away from possible sources of ignition.

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## VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

**VENTILATION REQUIREMENTS:** Work in well ventilated areas. Special ventilation is not required under normal use. Good engineering controls in high volume uses is required in some localities.

### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY:** Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respiratory protection following manufacturer's recommendation where spray, mist, or vapor may be generated. Supplied air respiratory protection is required for IDLH areas.

**EYE:** Face shield and goggles or chemical goggles should be worn where mist or spray may be generated.

**GLOVES:** Impervious gloves should be worn during routine handling of this product.

**OTHER CLOTHING AND EQUIPMENT:** Standard work clothing. Shoes contaminated with this product that can not be decontaminated should be discarded. Clothing contaminated with this product should be removed, washed in soap and water and dried before reuse. Contaminated clothing should be stored in well ventilated areas. Shower and eyewash facilities should be accessible.

### MONITORING EXPOSURE

**BIOLOGICAL:** No applicable procedure; breath analysis for hydrocarbons has been suggested.

**PERSONAL/AREA:** Based on similarity to Kerosene, both active and passive monitors employing charcoal absorption followed by gas chromatography. An average molecular weight of 170 has been suggested as the average value to convert the determined weight of hydrocarbons to ppm. Direct reading indicating tubes are available to evaluate short term exposure.

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# Material Safety Data Sheet

HD-5 PROPANE FUEL (ODORIZED)

CPS262200

Page 1 of 8

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information incorporated in your MSDS.

This is a new Material Safety Data Sheet.

## 1. PRODUCT IDENTIFICATION

HD-5 PROPANE FUEL (ODORIZED)

- DANGER:
- EXTREMELY FLAMMABLE
  - LIQUID CAN CAUSE EYE AND SKIN INJURY
  - MAY EXCLUDE OXYGEN AVAILABLE FOR BREATHING
  - DETECTION OF LEAK VIA SENSE OF SMELL MAY NOT BE POSSIBLE IF ODORANT HAS DEGRADED. SEE SECTION 6.
  - CONTENTS UNDER PRESSURE
  - KEEP OUT OF REACH OF CHILDREN

PRODUCT NUMBER(S): CPS262200 WPS-300

PRODUCT INFORMATION: (918)560-4134

Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

---

**2. FIRST AID-EMERGENCY PH. (800)457-2022/(510)233-3737 (24 HR)**

---

**EYE CONTACT:**

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. See a doctor for further treatment as soon as possible.

**SKIN CONTACT:**

Skin contact with the liquid may result in frostbite and burns. Soak contact area in tepid water to alleviate the immediate effects and get medical attention.

**INHALATION:**

If any signs or symptoms as described in this document occur, move the person to fresh air. If any of these effects continue, see a doctor.

**INGESTION:**

Not expected to be an ingestion problem, no first aid procedures are required.

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**3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)**

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**EYE CONTACT:**

The gas phase is not expected to cause eye irritation. However, the liquid can cause frostbite and burns. This hazard evaluation is based on the data from similar materials.

**SKIN IRRITATION:**

The gas is not irritating to the skin. However, skin contact with liquid or solid can cause severe frostbite or burns. This hazard evaluation is based on data from similar materials.

**DERMAL TOXICITY:**

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin. This hazard evaluation is based on data from similar materials.

**RESPIRATORY/INHALATION:**

This material can act as a simple asphyxiant by displacement of air. Signs and symptoms of the resultant central nervous system effects may include rapid breathing, incoordination, rapid fatigue, excessive salivation, disorientation, headache, nausea and vomiting. Convulsions, loss of consciousness, coma and/or death may occur if exposure to high concentrations continues. Read the Additional Health Data section (12) of this document for more information.

**INGESTION:**

Material is a gas and cannot usually be swallowed.

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**4. PROTECTIVE EQUIPMENT**

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**EYE PROTECTION:**

Appropriate eye protection must be worn when working with this material or serious harm can result. Wear chemical goggles or a face shield at all

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NDA - No Data Available

NA - Not Applicable

times.

**SKIN PROTECTION:**

Do not get on skin or on clothing. Wear protective clothing including gloves when handling.

**RESPIRATORY PROTECTION:**

No special respiratory protection is normally required.

**VENTILATION:**

Use this material only in well ventilated areas.

---

**5. FIRE PROTECTION**

---

**FLASH POINT:** (CC) <94F (70C)

**AUTOIGNITION:** 450C (842F)

**FLAMMABILITY LIMITS** (% by volume in air): Lower: 2.1 Upper: 9.5

**EXTINGUISHING MEDIA:**

Stop flow of gas. CO2 for small fires. Water fog.

**NFPA RATINGS:** Health 1; Flammability 4; Reactivity 0; Special NDA; (Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, the National Paint and Coating Association, and do not necessarily reflect the hazard evaluation of the Chevron Environmental Health Center. Read the entire document and label before using this product.

**FIRE FIGHTING PROCEDURES:**

This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches.

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document. Petroleum gases are heavier than air and travel along the ground or into drains to possible distant ignition sources, causing an explosive flashback.

**COMBUSTION PRODUCTS:**

Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

---

**6. STORAGE, HANDLING, AND REACTIVITY**

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**HAZARDOUS DECOMPOSITION PRODUCTS:**

NDA

**STABILITY:**

Stable.

**HAZARDOUS POLYMERIZATION:**

Polymerization will not occur.

**INCOMPATIBILITY:**

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**SPECIAL PRECAUTIONS:**

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed. Before entry into confined spaces that may have contained hazardous material, determine concentrations and take appropriate measures for personal protection. Material presents a hazard that may require personal protective equipment for entry. CONTAINER UNDER PRESSURE. Store away from strong oxidizing materials. Exposure to heat or prolonged exposure to sun may cause container to burst. Do not puncture, incinerate, or store above 120 F.

Special precautions should be taken when entering or handling equipment in this type of gas service because of possible radioactive contamination. All equipment should be checked for radioactivity or opened to the atmosphere and have forced ventilation applied for at least four hours prior to entry or handling. Avoid direct skin contact with any surface. Avoid generation of dust, smoke, fumes, etc. in the work area, or if they cannot be avoided, a tested and certified radionuclide dust respirator should be worn. Smoking, eating, or drinking, should be prohibited when working with the equipment. Employees should wash thoroughly with soap and water and discard contaminated clothing after entering or handling the equipment.

This product has been odorized in order to aid in its detection in case of a leak or accidental discharge. During shipping or storage of an odorized material, alteration of the odorant and subsequent reduction in its effectiveness may occur.

Odorants are reactive. Rust and scale in storage containers and pipes may significantly reduce an odorant's effectiveness. For this reason, storage containers must be free of rust and scale. Whenever an empty cylinder is filled, it must be properly purged and conditioned to remove air and water and to deactivate sites for oxidation of the odorant. Underground pipelines should also be checked periodically for leaks.

Prolonged exposure to an odorant or other strong smells in the environment may reduce an individual's ability to detect the odorant. People with an impaired ability to detect odors due to colds, allergies, smoking, injuries, etc., must be especially cautious.

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## 7. PHYSICAL PROPERTIES

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SOLUBILITY: Soluble in alcohol, ether and hydrocarbons; insoluble in water.

APPEARANCE: Colorless gas or liquid with distinct odor of commercial natural gas.

BOILING POINT: -44F (-42C)

MELTING POINT: NA

EVAPORATION: NDA

SPECIFIC GRAVITY: 0.5 @ 15.6/15.6C.

VAPOR PRESSURE: 208 PSI @ 37.8C (Max.).

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NDA - No Data Available                      NA - Not Applicable

PERCENT VOLATILE (VOLUME %): 100%  
VAPOR DENSITY (AIR=1): 1.6

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## ~~8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL~~

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CHEMTREC EMERGENCY PH. (800)424-9300/(202)483-7616 (24 hr)

### SPILL/LEAK PRECAUTIONS:

Eliminate all sources of ignition in vicinity of spill or released vapor.

If this material is released into a work area, evacuate the area immediately. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Protective Equipment section.

### DISPOSAL METHODS:

Allow to evaporate with adequate ventilation.

---

## 9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

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### COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory. This material is classified as a simple asphyxiant. When working with this material, the minimal oxygen content should be 18 percent by volume under normal atmospheric pressure.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

### PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100.0 % HD-5 PROPANE FUEL (ODORIZED)

#### CONTAINING

> 90.0 % PROPANE  
CAS74986 Asphyxiant ACGIH TLV  
1000ppm OSHA TWA

< 10.0 % ETHANE  
CAS74840 Asphyxiant ACGIH TLV

< 5.0 % PROPYLENE  
CAS115071 A toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.  
ACGIH TLV

< 2.5 % HYDROCARBONS, C4 AND UP  
CAS68476448

RADON

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NDA - No Data Available      NA - Not Applicable

CAS14859677

AND

ODORANT

TLV - Threshold Limit Value  
STEL - Short-term Exposure Limit  
RQ - Reportable Quantity  
CC - Chevron Chemical Company  
TWA - Time Weighted Average  
TPQ - Threshold Planning Quantity  
CPS - CUSA Product Code  
CAS - Chemical Abstract Service Number

## 10. REGULATORY INFORMATION

DOT basic descriptions can vary based on package quantity and may not coincide with international description requirements. Consult the Hazardous Materials Regulations in 49CFR and the appropriate Dangerous Goods Regulations to confirm description applicability to specific shipments.

DOT SHIPPING NAME: LIQUEFIED PETROLEUM GAS  
DOT HAZARD CLASS: FLAMMABLE GAS  
DOT IDENTIFICATION NUMBER: UN1075

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects; YES
2. Delayed (Chronic) Health Effects; NO
3. Fire Hazard; YES
4. Sudden Release of Pressure Hazard; YES
5. Reactivity Hazard; NO

The following components of this material are found on the regulatory lists indicated by the number below the component name:

PROPYLENE  
is found on lists: 01,02,10,11,13,14,  
RADON  
is found on lists: 06,  
ETHANE  
is found on lists: 02,10,11,13,14,  
PROPANE  
is found on lists: 02,10,11,13,14,17,

### REGULATORY LISTS SEARCHED:

01=SARA 313	02=MASS RTK	03=NTP Carcinogen
04=CA Prop. 65	05=MI 406	06=IARC Group 1
07=IARC Group 2A	08=IARC Group 2B	09=SARA 302/304
10=PA RTK	11=NJ RTK	12=CERCLA 302.4
13=MN RTK	14=ACGIH TLV	15=ACGIH STEL
16=ACGIH Calculated TLV	17=OSHA TWA	18=OSHA STEL
19=Chevron TLV	20=EPA Carcinogen	21=TSCA Sect 4(e)
22=TSCA Sect 5(a)(e)(f)	23=TSCA Sect 6	24=TSCA Sect 12(b)
25=TSCA Sect 8(a)	26=TSCA Sect 8(d)	28=Canadian WHMIS

Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

11. PRODUCT TOXICOLOGY DATA

EYE IRRITATION:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

SKIN IRRITATION:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

DERMAL TOXICITY:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

RESPIRATORY/INHALATION:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

INGESTION:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

12. ADDITIONAL HEALTH DATA

ADDITIONAL HEALTH DATA COMMENT:

This product may contain detectable but varying quantities of the naturally occurring radioactive substance radon 222. The amount in the gas itself is not hazardous, but since radon rapidly decays (t1/2 = 3.82 days) to form other radioactive elements including lead 210, polonium 210, and bismuth 210, equipment may be radioactive. The radon daughters are solids and therefore may attach to dust particles or form films and sludges in equipment. Inhalation, ingestion or skin contact with radon daughters can lead to the deposition of radioactive material in the lungs, bone, blood forming organs, intestinal tract, kidney, and colon. Occupational exposure to radon and radon daughters has been associated with an increased risk of lung cancer in underground uranium miners. Follow the Special Precautions contained in this document.

This product contains butane. An atmospheric concentration of 100,000 ppm (10%) butane is not noticeably irritating to the eyes, nose or respiratory tract, but will produce slight dizziness in a few minutes of exposure. No chronic systemic effect has been reported from occupational exposure.

This product contains isobutane. Isobutane has been shown to increase airway resistance by bronchioconstriction and decrease pulmonary compliance and tidal volume (difficulty in breathing). Air containing 27% isobutane was found to decrease respiratory rate and proved to be fatal to rats.

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Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

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The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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Revision Number: 0      Revision Date: 04/28/92      MSDS Number: 004919  
NDA - No Data Available      NA - Not Applicable

**Appendix C**

**Spill / Leak Contingency Plans**

EMERGENCY RESPONSE PLAN

IN THE EVENT A TOXIC SUBSTANCE RELEASE SHOULD OCCUR FROM FIRES, EXPLOSION, OR ANY UNPLANNED SUDDEN, OR NON-SUDDEN RELEASE OF A HAZARDOUS WASTE - THE RESPONSIBLE PATE TRUCKING, INC. EMPLOYEE AT THE SCENE, OR THE OPERATION, SHALL TAKE THE FOLLOWING ACTIONS:

1. Promptly notify his immediate supervisor or any Pate employee, of the release, it's location, and approximately magnitude. It is of the utmost importance that this first notification be given IMMEDIATELY on direction of a release so that notification of other company employees, residents of the area, and the general public may begin evacuation; If warranted under this contingency plan.
2. Promptly render a judgment as to:
  - A. Whether or not any human life or property is in danger.
  - B. The source and cause of the emission.
  - C. Whether or not the toxic substance release can be readily stopped or brought under control without posing a danger to the health or safety of the employee.
3. If any human life or property is in danger, take prompt action to alleviate such danger, to the extent possible.
4. If the escape can be readily stopped, or brought under control, the employee should do so.

NOTE: PATE TRUCKING, INC., DOES NOT EXPECT ANY EMPLOYEE TO PLACE HIS LIFE OR HEALTH IN JEOPARDY AS RESULT OF ANY ACTION TAKEN UNDER THIS PLAN. ACTION UNDER POINTS 2, 3, AND 4, ABOVE SHOULD BE TAKEN IN CONJUNCTION WITH ANOTHER COMPANY EMPLOYEE, UNLESS IT IS CLEARLY EVIDENT THAT SUCH ACTION MAY BE UNDERTAKEN WITHOUT RISK TO THE EMPLOYEE. NO PATE EMPLOYEE SHALL ATTEMPT TO GO ON A LEAK DETECTION MISSION WITHOUT FIRST NOTIFYING HIS IMMEDIATE SUPERVISOR, OR ANOTHER COMPANY EMPLOYEE OF HIS INTENTIONS.

I, James Mayo, HAVE READ AND HAVE HAD THE ABOVE POLICY EXPLAINED TO ME, AND THOROUGHLY UNDERSTAND ITS APPLICATION AND PURPOSE. I FURTHER UNDERSTAND THAT FAILURE TO STRICTLY ADHERE TO THIS POLICY COULD RESULT IN SERIOUS INJURY TO MYSELF AND/OR FELLOW WORKERS AND WILL RESULT IN DISCIPLINARY ACTIONS.

James Mayo  
EMPLOYEE SIGNATURE  
Harry D. Reed  
FOREMAN SIGNATURE

12-27-95  
DATE  
12/27/95  
DATE

**Appendix D**  
**Water Well Records**

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Francisco Narroquin  
 Street and Number Star Rt. "A" Llano Grande Road,  
 City Hobbs, Twp. 5 - 31 N. Llano Grande State New Mexico, 88240.  
 Well was drilled under Permit No. L-6759 and is located in the  
1/4 1/4 1/4 of Section 15 Twp. 19-S Rge. 38-E  
 (B) Drilling Contractor Glasspoole W.W. Serv. License No. WD-447  
 Street and Number P.O. Box 52,  
 City Hobbs, State New Mexico, 88240.  
 Drilling was commenced 3-10- 19 71  
 Drilling was completed 3-12- 19 71

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well ASXIX. 100 ft.  
 State whether well is shallow or artesian Shallow Depth to water upon completion 45 ft.

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	<u>45</u>	<u>100</u>	<u>55</u>	<u>Water-Sand Brown Soft.</u>
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
<u>6-5/8</u>		<u>Welded</u>	<u>0</u>	<u>100</u>	<u>100</u>	<u>None</u>	<u>80</u>	<u>100</u>

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>8"</u>			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY  
 Date Received 2008 APR 01 11:51 AM  
 File No. L-6759 Use Down Location No. 19-38-15-221

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well FRANCISCO WARROQUIA  
 Street and Number 2000 Grande Road Route A  
 City HOBBS State NM  
 Well was drilled under Permit No. L-6858 and is located in the  
1/4 SW 1/4 NE 1/4 of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor J. G. Baston License No. WR14  
 Street and Number Box 42  
 City Hobbs State NM  
 Drilling was commenced Nov 29 1971  
 Drilling was completed Dec 6 1971

(Plat of 640 acres)

Elevation at top of casing in feet above sea level - Total depth of well 100  
 State whether well is shallow or artesian Shallow Depth to water upon completion 45

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	45	65	20	Soft Brown Sand
2	90	100	10	Soft Brown Sand
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
6 5/8		welded	0	100	100	None	70	100

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7			

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 71  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received DEC 13 AM 8:33 ✓

File No. L-6858 Use Dom. Location No. 19-38-15-230

STATE ENGINEER OFFICE  
WELL RECORD

FIELD ENGINEER LOG

Section 1. GENERAL INFORMATION

(A) Owner of well Bobby Townsend Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 321 West Palace  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7357 and is located in the:

- a. 15  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. Lea of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 4/11/75 Completed 4/12/75 Type tools Cable Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 101 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
47	101	54		

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	101	101	None	60	101

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top.

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-7357 Use Dom Location No. 19.38.15.24221

1535

STATE ENGINEER OFFICE  
WELL RECORD

FILED 800.108

Section 1. GENERAL INFORMATION

(A) Owner of well G. D. Lee Owner's Well No. 80090-1  
Street or Post Office Address Star Rt. A Box 26  
City and State Hobbs, New Mexico, 88240

Well was drilled under Permit No. L-8046 and is located in the:

- a. SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Gade Oldaker License No. WD-657

Address P. O. Box 2321, Hobbs, New Mexico, 88240

Drilling Began 3/20/80 Completed 3/20/80 Type tools rotary Size of hole 10 $\frac{1}{2}$  in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 130 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 58 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
58	130	72	Water, Sand	25 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	130	130	none	110	130

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		10 $\frac{1}{2}$			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received May 7, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8046 Use DOM Location No. 19.38.15.244

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Wilbur Sherrill Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 1101 South Dal Paso  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7359 and is located in the:

a.  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 4/10/75 Completed 4/11/75 Type tools Cable Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 117 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 57 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
57	117	60		

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	117	117	NONE	77	117

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top.

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-7359

Use Dom

Location No. 19.38.15.2444

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well T. M. Dean  
 Street and Number 623 South Linam St.  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-2667 and is located in the  
1/4 S 1/4 SE 1/4 of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor O. R. Musslawhite License No. WD99  
 Street and Number Box 56  
 City Hobbs State New Mexico  
 Drilling was commenced Feb. 21 1957  
 Drilling was completed Feb. 22 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 106  
 State whether well is shallow or artesian Shallow Depth to water upon completion 70

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	80	105	25	Red sand & sand rock
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	20	None	0	10	10	None	None	

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received MAY 17 1957

OFFICE OF THE STATE ENGINEER  
 DISTRICT WATER SUPERVISOR  
 ALBUQUERQUE, NEW MEXICO

File No. L-2667 Use Dom Location No. 19.38.15.400

STATE ENGINEER OF  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well C.C. BONNER Owner's Well No. 62298  
 Street or Post Office Address 4 LAND GRANDE RD.  
 City and State Hobbs N.M.

Well was drilled under Permit No. 4-7512 and is located in the:  
 a.  $\frac{1}{4}$   $\frac{1}{4}$  N/2  $\frac{1}{4}$  SE/4 of Section 15 Township 19S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in LEA County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD 657  
 Address P.O. Box 2321 Hobbs N.M.  
 Drilling Began 4-12-76 Completed 4-14-76 Type tools CABLE Size of hole 8 in.  
 Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	water, SAND	25 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 3/8			0	100	100	NONE	85	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		8			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

Date Received April 26, 1976 FOR USE OF STATE ENGINEER ONLY  
 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. 141305

STATE ENGINEER OFFICE  
WELL RECORD

FIELD ENGINEER LOG

Section 1. GENERAL INFORMATION

(A) Owner of well Gerald W. Weldy Owner's Well No. 72825 1  
Street or Post Office Address 22 Llano Grande Rd.  
City and State Hobbs, N. M. 88240

Well was drilled under Permit No. L-7882 and is located in the:

- a.  $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19 S Range 38E N.M.P.M.
- b. Tract No. 8 of Map No. \_\_\_\_\_ of the Llano Grande Sub.
- c. Lot No. \_\_\_\_\_ of Block No. 1 of the Llano Grande Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor G. D. Oldaker License No. WD-657

Address P. O. Box 2321, Hobbs, N. M. 88240

Drilling Began 4- 18 -79 Completed 4- 19-79 Type tools Cable Size of hole 9 in.

Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	Water and Sand	25 G P M

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	100	100	none	85	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		9			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received April 27, 1979

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-7882 Use DOM. Location No. 19.38.15.41100

STATE ENGINEER OF  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Frank Glasspoole Owner's Well No. \_\_\_\_\_  
Street or Post Office Address Star Rt. "A" 628 Llano Grande  
City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-6101 and is located in the:  
a.  $\frac{1}{4}$   $\frac{1}{4}$   $N\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19 Range 38E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD- 657  
Address P.O. Box 2321, Hobbs, N.M. 88240  
Drilling Began 12-20-85 Completed 12-22-85 Type tools Roary Size of hole 7 in.  
Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 38 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
38	100	62	Water, Sand	25G PM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
65/8			0	100	100	none	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		7			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received April 13, 1987 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-6101 Use DOMESTIC Location No. 19.38.15.41131

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well J. O. Clark  
 Street and Number Box 758  
 City Hobbs State N.M.  
 Well was drilled under Permit No. L-4489 and is located in the  
SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor J. E. Barton License No. WD14  
 Street and Number 920 E. Gypsy Box 42  
 City Hobbs State N.M.  
 Drilling was commenced 8-24-60 19\_\_\_\_  
 Drilling was completed 8-28-60 19\_\_\_\_

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 100  
 State whether well is shallow or artesian shallow Depth to water upon completion 41'

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	<u>41'</u>	<u>50'</u>	<u>9'</u>	<u>Sand Rock (Porous)</u>
2	<u>50</u>	<u>100</u>	<u>50</u>	<u>Water Sand</u>
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
<u>5"</u>	<u>plastic</u>		<u>0</u>	<u>100</u>				

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>7"</u>			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE

Date Received \_\_\_\_\_

1960 SEP - 1 PM 8:20

File No. L-4489 Use Dom Location No. 19-38-15-413

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well James Fulberson Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 125 E. Llano Grande  
City and State Hobbs, NM 88240

Well was drilled under Permit No. L-10,046 and is located in the:  
a. \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 N1/2 SE 1/4 of Section 15 Township 19S Range 38E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Larry's Drilling License No. WD882  
2116 W. Bender, Hobbs, NM88240  
Address \_\_\_\_\_

Drilling Began 11-18-88 Completed 11-26-88 Type tools Button Size of hole 83/4 in.  
Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 70 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
70	120	50	sand & sandstone	30

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 1/2	160PVC		-1	120	121		100	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received December 5, 1988 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. L-10,046 Use DOMESTIC Location No. 19.38.15.4130

STATE ENGINEER OF  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Benny Boddy Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address 704 932  
 City and State Hotchkiss NM

Well was drilled under Permit No. L-9821 and is located in the:  
 a.  $\frac{1}{4}$   $\frac{1}{4}$   $N\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19-S Range 38-E N.M.P.M.  
 b. Tract No. 7 of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. 1 of the LLANO GRANDE  
 Subdivision, recorded in 1982 County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor C.M. Griffin License No. WD 603  
 Address 201 W ALTO Hobbs, N.M 88240  
 Drilling Began 5/2/86 Completed 5/3/86 Type tools Rotary Size of hole 7 1/2 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 51 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
<u>50</u>	<u>100</u>	<u>50</u>	<u>Red Sand</u>	<u>100</u>

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>5</u>			<u>0</u>	<u>100</u>	<u>100</u>	<u>None</u>	<u>80</u>	<u>100</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
<u>0</u>	<u>100</u>	<u>7 1/2</u>	<u>1</u>		<u>Helw/water</u>

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

FOR USE OF STATE ENGINEER ONLY

Date Received May 12, 1986 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-9821 Use DOMESTIC Location No. 19.38.15.41340  
19 38 15 41340

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Leo L. Robbins Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address \_\_\_\_\_  
 City and State Hobbs, N.M.

Well was drilled under Permit No. L-9018 and is located in the:

- a.  $\frac{1}{4}$  Sec.  $\frac{1}{4}$  N.  $\frac{1}{4}$  E. of Section 15 Township 19 Range 5NE N.M.P.M.  
 b. Tract No. 5 of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. 2 of the Llano Grande  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Cladner & Sons License No. ND-657  
 Address P.O. Box 2321, Hobbs N.M.

Drilling Began 8-2-82 Completed 9-3-82 Type tools Cable Size of hole 10 1/2 in.  
 Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 32 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
32	100	68	Water sand	25

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 1/2			0	100	100	None	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		10 1/2			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

State Engineer Representative

FOR USE OF STATE ENGINEER ONLY

Date Received October 31, 1983

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-9018

Use DOMESTIC

Location No. 19.38.15.414

## WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well HAZEL K. DOBBINS Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address # 15 LLANO GRANDE  
 City and State HOBBS, N.M. 88240

Well was drilled under Permit No. L-9310 and is located in the:

a. \_\_\_\_\_  $\frac{1}{4}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. PT. 5 & 6 Block No. 2 of the LLANO GRANDE  
 Subdivision, recorded in LEA County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor GENE EADES License No. WD982

Address RT. 4 TAHOKA, TX. 79373

Drilling Began 8-29-83 Completed 8-29-83 Type tools Rotary Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 58 ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
<u>58</u>	<u>120</u>	<u>62</u>	<u>WATER SAND</u>	<u>35</u>

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>5 3/4</u>	<u>160 psi</u>				<u>120</u>		<u>110</u>	<u>120</u>

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

## FOR USE OF STATE ENGINEER ONLY

Date Received September 1, 1983

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-9310 Use DOMESTIC Location No. 19,38.15.414

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well B.R. Dobbins Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P.O. Box 1825  
City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7381 and is located in the:

- a.  $\frac{1}{4}$   $\frac{1}{4}$  N $\frac{1}{2}$   $\frac{1}{4}$  SE of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. 6 of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. 2 of the Llano Grande  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 5/15/75 Completed 5/16/75 Type tools Cable Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 100 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 50 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
50	100	50	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	12	Welded	0	100	100	None	80	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
					Cement at top

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

Date Received Dec. 3, 1976 FOR USE OF STATE ENGINEER ONLY

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-7381 Use Don. + STK Location No. 19, 33, 15, 4/4/12

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Neal Attaway  
 Street and Number Star Route A Box 13-D  
 City Hobbs New Mexico State \_\_\_\_\_  
 Well was drilled under Permit No. L-5013 and is located in the  
 \_\_\_\_\_  $\frac{1}{4}$  NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Twp. 19S Rge. 38E  
 (B) Drilling Contractor J. E. Barton License No. WT-14  
 Street and Number Box 42  
 City H State New Mexico  
 Drilling was commenced April 9 1963  
 Drilling was completed April 10 1963

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 1008-- 100'  
 State whether well is shallow or artesian shallow Depth to water upon completion 17'

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	53	61	8'	
2	86	91	5'	
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor PLOMB License No. \_\_\_\_\_  
 Street and Number 2 City MARCO State \_\_\_\_\_  
 Tons of Clay used 80 Tons of Roughage used 800 Type of roughage \_\_\_\_\_  
 Plugging method used PT Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: 8 PLOMB Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received APR 30 1963

File No. L-5013 Use Don Location No. 19-38-15-420

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Mrs. R.W. Scott Owner's Well No. \_\_\_\_\_  
Street or Post Office Address P.O. Box 974  
City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-9896 and is located in the:

- a.  $\frac{1}{4}$   $\frac{1}{4}$  N $\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 15 Township 19S Range 38E N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor G.D. Oldaker License No. WD-657  
Address P.O. Box 2321, Hobbs, N.M. 88240

Drilling Began 2-15-87 Completed 2-17-87 Type tools Rotary Size of hole 7 in.  
Elevation of land surface or 3650 at well is 3650 ft. Total depth of well 100 ft.  
Completed well is  shallow  artesian. Depth to water upon completion of well 38 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
38	100	62	Water Sand	25 G P M

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5			0	100	100	none	70	100

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
		7			

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received February 29, 1988

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-9896

Use DOM

Location No. 19.38.15.42124

FIELD LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Wayne Ballew  
 Street and Number \_\_\_\_\_  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-4107 and is located in the  
 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 of Section \_\_\_\_\_ Twp. \_\_\_\_\_ Rge. \_\_\_\_\_  
 (B) Drilling Contractor Ed Burke License No. WD 111  
 Street and Number Box 306  
 City Hobbs State New Mexico  
 Drilling was commenced April 23 19 59  
 Drilling was completed April 23 19 59

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 112  
 State whether well is shallow or artesian shallow Depth to water upon completion 60

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	60	122	62	Water sand
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7	24	10	0	112	112	Plain	78	112

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

MAY 7 - 1959

OFFICE SUPERVISOR

File No. L-4107 Use \_\_\_\_\_ Location No. 19.38.15.422

**FIELD ENGR. LOG**

**WELL RECORD**

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well J E Barton  
 Street and Number 920 East Gypsy  
 City Hobbs State N M.  
 Well was drilled under Permit No. L-4622 and is located in the  
NE 1/4 of Section 15 Twp 19S Rge 38E  
 (B) Drilling Contractor J E Barton License No. WD14  
 Street and Number 920 E Gypsy  
 City Hobbs State N M.  
 Drilling was commenced June-1 19 61  
 Drilling was completed June-1 19 61

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 70 feet  
 State whether well is shallow or artesian shallow Depth to water upon completion 46

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	<u>46</u>	<u>70</u>	<u>24</u>	<u>watersand and loose rock</u>
2				
3				
4				
5				

Section 3

RECORD OF CASING

7 inch curb.4 feet.

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>7</u>			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY  
 STATE ENGINEER OFFICE  
 Date Received 8:28 AM AUG 15 1961

File No. L-4622 Use Dem. Location No. 19.38.15.422

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Terry Morrow Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P. O. Box 2096  
 City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-7379 and is located in the:

a. 1/4 SW 1/4 NE 1/4 SE 1/4 of Section 15 Township 19S Range 38E N.M.P.M.

b. Tract No. 8 of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. 3 of Block No. 2 of the Llano Grande

Subdivision, recorded in Lea County. Thence S 0°10' W 416 ft., thence S 89°57' E 104 ft., thence N 0°10' E 416 ft., thence N 89°57' W 104 ft.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System to point of Beg. Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor C. M. Griffin License No. WD-603

Address P. O. Box 2096, Hobbs, New Mexico 88240

Drilling Began 5/26/75 Completed 5/31/75 Type tools Spudder Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 120 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 44 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
49	120	71	Red sand with sand rock stringers	25

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8			0	120	120		90	120

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
38	120	8	6		Gel mixed with water

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. 2-7379 Use Dom Location No. 19.38.15.42312

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Tommy Phar  
 Street and Number 813 East Marland  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-4539 and is located in the  
se 1/4 ne 1/4 se 1/4 of Section 15 Twp. 19 Rge. 38e  
 (B) Drilling Contractor J. E. Barton License No. WD14  
 Street and Number Box 42  
 City Hobbs State N.M.  
 Drilling was commenced Nov 4 19 60  
 Drilling was completed Nov 5 19 60

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 100 feet  
 State whether well is shallow or artesian Shallow Depth to water upon completion 48 feet

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	0	2	2	dark soil
2				
3	48	65	17	watersand
4	90	100	10	watersand
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7			0	8	8		For Curb	

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		7			

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE

Date Received 1960 NOV 29 AM 8:27

File No. L-4539

Use Sam & Stock Location No. 19.38.15.424

WELL RECORD

FIELD ENGR. LOG

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

#5	017	LC-84-5	

(A) Owner of well HARDIN & HOUSTON, INC.  
 Street and Number BOX 102  
 City HOBBS, N.M. L-6733 State \_\_\_\_\_  
 Well was drilled under Permit No. 1-6734(K) and is located in the  
SE 1/4 NE 1/4 SE 1/4 of Section 15 Twp. 19 Rge. 38  
 (B) Drilling Contractor ABEOTT BRGS. License No. WD-46  
 Street and Number BOX 637  
 City HOBBS, N.M. State \_\_\_\_\_  
 Drilling was commenced NOV. 15, 1970 19\_\_\_\_  
 Drilling was completed NOV. 16, 1970 19\_\_\_\_

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 123'  
 State whether well is shallow or artesian \_\_\_\_\_ Depth to water upon completion 50

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	40	123	83	water sand
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
7	23	8	1	123	123	none	50	123

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_  
**FOR USE OF STATE ENGINEER ONLY**  
 Date Received \_\_\_\_\_

File No. L-6733 Use Dom Location No. 19-38-15-4244

STATE ENGINEER OF NEW MEXICO  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Jim Spradley Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P.O. Box 2187  
 City and State Hobbs, N.M. 88240

Well was drilled under Permit No. L-10,322 and is located in the:  
 a.  $\frac{1}{4}$  SE  $\frac{1}{4}$  <sup>NE $\frac{1}{4}$</sup>  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 17-15 Township 19S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Alan Eades License No. WD-1044  
 Address 1200 E. Bender, Hobbs, N.M. 88240  
 Drilling Began 4-13-93 Completed 4-13-93 Type tools Rotary Size of hole 8 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 133 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 44 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
44	133	89	Sand & Sandstone Stringers sandstone, Sand & Gravel	35

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 3/4	160psi				133		113	133

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received May 7, 1993 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-10,322 Use D & S Location No. 19.38.15.42424

150

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Hendon, Hendon  
 Street and Number \_\_\_\_\_  
 City Halla State Ill  
 Well was drilled under Permit No. L-5623 and is located in the  
SE 1/4 NE 1/4 SE 1/4 of Section 15 Twp. 19 Rge. 38E  
 (B) Drilling Contractor JE BARTON License No. WD14  
 Street and Number Box 42  
 City Halla State Ill  
 Drilling was commenced 6-1- 1964  
 Drilling was completed 6-6- 1964

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 142  
 State whether well is shallow or artesian Shallow Depth to water upon completion 52

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	52	68	16	Water sand
2	70	105	15	Water sand
3	132	138	6	Water sand
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
<u>6 3/4</u>	<u>11</u>	<u>Welded</u>	<u>0</u>	<u>142</u>	<u>142</u>	<u>None</u>	<u>100</u>	<u>142</u>

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				
		<u>7</u>			

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

FOR USE OF STATE ENGINEER ONLY  
 STATE ENGINEER OFFICE  
 Date Received 1965 JUL 19 AM 8:25  
 Basin Supervisor \_\_\_\_\_  
 File No. L-5623 Use Comm Location No. 19.38.15.424

# WELL RECORD

Date of Receipt December 27, 1954 Permit No. L-2689

Name of permittee, M L Bingham

Street or P. O. 1207 East Park City and State Hobbs New Mexico

1. Well location and description: The shallow well is located in se  $\frac{1}{4}$ , se  $\frac{1}{4}$ ,  
(and/or of section)

se  $\frac{1}{4}$  of Section 15, Township 19, Range 38; Elevation of top of

casing above sea level, \_\_\_\_\_ feet; diameter of hole, 6 inches; total depth, 83 feet;

depth to water upon completion, 49 feet; drilling was commenced 11-29, 1954,

and completed 11-30, 1954; name of drilling contractor J L Barton

; Address Box 42 Hobbs N.M.; Driller's License No. WD14

### 2. Principal Water-bearing Strata:

	Depth in Feet		Thickness	Description of Water-bearing Formation
	From	To		
No. 1	<u>49</u>	<u>60</u>	<u>11</u>	<u>light brown watersand</u>
No. 2	<u>68</u>	<u>83</u>	<u>15</u>	<u>brown watersand</u>
No. 3				
No. 4				
No. 5				

### 3. Casing Record

Diameter in inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner Top	Feet of Casing Bottom	Type of Shoe	Perforation	
						From	To
<u>7</u>			<u>0</u>	<u>5</u>	<u>5</u>		<u>for purpose of curb</u>

4. If above construction replaces old well to be abandoned, give location: \_\_\_\_\_  $\frac{1}{4}$ , \_\_\_\_\_  $\frac{1}{4}$ , \_\_\_\_\_  $\frac{1}{4}$

of Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_; name and address of plugging contractor,

date of plugging \_\_\_\_\_, 19\_\_\_\_; describe how well was plugged: \_\_\_\_\_

FILED  
DEC 27 1954  
OFFICE  
GROUND WATER SUPERVISOR  
ROSWELL, NEW MEXICO

✓

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well N. L. Bingham  
 Street and Number Star route A.  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-3248 and is located in the  
no 1/4 sa 1/4 ss 1/4 of Section 15 Twp. 19s Rge. 38a  
 (B) Drilling Contractor J. F. Barton License No. ED14  
 Street and Number Box 42  
 City Hobbs State N. M.  
 Drilling was commenced Apr-20- 1958  
 Drilling was completed Apr-26- 1958

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 123 feet  
 State whether well is shallow or artesian shallow Depth to water upon completion 43 feet

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	43	60	12	watersand
2	81	90	9	watersand
3	105	114	9	watersand
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe.	Perforations	
			Top	Bottom			From	To
14		none	0	123	123	none	58	120

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor  
 FOR USE OF STATE ENGINEER ONLY  
 Date Received MAY 8 1958  
 OFFICE  
 GROUND WATER SUPERVISOR  
 ROSWELL, NEW MEXICO.

File No. L 3248 Use SW Location No. 19 38 15 #42

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

FIELD ENGINEER LOG

(A) Owner of well A.A. Aaron Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Star Route 8, Box 70  
 City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-8352 and is located in the:  
 a. \_\_\_\_\_ ¼ \_\_\_\_\_ ¼ SE ¼ SE ¼ of Section 15 Township 19S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240  
 Drilling Began 9/16/80 Completed 9/17/80 Type tools Cable Size of hole 8 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 118 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 50 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	118	58	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	19	Welded	0	118	118	None	78	118

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received September 19, 1980

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-8352 Use DOM. Location No. 19.38.15.44

Section 1. GENERAL INFORMATION

(A) Owner of well Joe Tarbet Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Rt. 4, Box 333A  
 City and State Seminole, Texas 79360

Well was drilled under Permit No. L-10, 138 and is located in the:

- a.  $\frac{1}{4}$   $\frac{1}{4}$  S $\frac{1}{2}$   $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 14 Township 19-S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began Dec. 9, 1990 Completed Dec. 15, 1990 Type tools Cable Tool Size of hole 16 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 170 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	166	106	Sand & etc	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
14	37	Welded	0	171	171	NONE	91	171

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 19, 1991 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-10,138 Use IRR Location No. 19.38.14.44333

19.38.14.44332

STATE ENGINEER OFFICE

WELL RECORD

FILED UNDER 100

Section 1. GENERAL INFORMATION

(A) Owner of well Walter W. Krug DBA Wallen Productions Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address Box 1960  
 City and State Midland, Texas 79702

Well was drilled under Permit No. L-8250 and is located in the:  
 a. NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  SW  $\frac{1}{4}$  of Section 14 Township 19-S Range 38-E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in \_\_\_\_\_ County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor W. L. Van Noy License No. WD-208  
 Address P. O. Box 74 Oil Center, New Mexico 88266

Drilling Began Jan 10, 1980 Completed Jan. 12, 1980 tools Spudder Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 125 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 80 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
95	120	25	<del>water</del> Sand.	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
6 5/8	welded		0	125	125	none	105	121

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received April 21, 1980 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-8250 Use OWD Location No. 19.38.14. 34244

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well Younger Construction Company  
 Street and Number Box 545  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-3658 and is located in the  
1/4 NW 1/4 SW 1/4 of Section 21 Twp. 19 S Rge. 38 E  
 (B) Drilling Contractor C.F. Musslowwhite License No. WD 99  
 Street and Number Box 56  
 City Hobbs State New Mexico  
 Drilling was commenced August 26 1957  
 Drilling was completed August 28 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 120  
 State whether well is shallow or artesian shallow Depth to water upon completion 50

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	85	120	35	Red sand
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
5 1/2	12	none	0	120	120	none	70	120

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor

**FILED**

FOR USE OF STATE ENGINEER ONLY

SEP 3 1957

Date Received \_\_\_\_\_

OFFICE  
GROUND WATER SUPERVISOR  
ROSWELL, NEW MEXICO

File No. L-3658 Use Don Location No. 19.38.14.310

# WELL RECORD

Date of Receipt ..... Permit No. L-1021  
& Enlarged

Name of permittee, J. A. Selman

Street or P. O. Star Route B, City and State Hobbs, New Mexico

1. Well location and description: The Shallow well is located in NW 5/2 NE SE  
(shallow or artesian) (NMPM)

NE  $\frac{1}{4}$  of Section 14, Township 19S, Range 38E; Elevation of top of

casing above sea level, ..... feet; diameter of hole, 16 inches; total depth, 125 feet;

depth to water upon completion, 65 feet; drilling was commenced April 10, 1953,

and completed April 13, 1953; name of drilling contractor O. R. Huskwhite

Box 56; Address, Hobbs, New Mexico; Driller's License No. WD 99

### 2. Principal Water-bearing Strata:

	Depth in Feet		Thickness	Description of Water-bearing Formation
	From	To		
No. 1	<u>65</u>	<u>85</u>	<u>20</u>	<u>Red Sand Fine</u>
No. 2	<u>88</u>	<u>125</u>	<u>37</u>	<u>Red Sand Course</u>
No. 3				
No. 4				
No. 5				

### 3. Casing Record:

Diameter in inches	Pounds per ft.	Threads per inch	Depth of Casing or Liner		Feet of Casing	Type of Shoe	Perforation	
			Top	Bottom			From	To
<u>16</u>	<u>30</u>	<u>None</u>	<u>0</u>	<u>3</u>	<u>3</u>			

4. If above construction replaces old well to be abandoned, give location: .....  $\frac{1}{4}$ , .....  $\frac{1}{4}$ , .....  $\frac{1}{4}$

of Section ....., Township ....., Range ....., name and address of plugging contractor,

date of plugging ....., 19.....; describe how well was plugged: .....

FILED  
APR 30 1953

Handwritten mark resembling a checkmark or signature.

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1


(A) Owner of well James A. Salman  
 Street and Number Star Route A.  
 City Hobbs State New Mexico  
 Well was drilled under Permit No. L-1021 and is located in the  
NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  of Section 14 Twp. 19S Rge. 38E  
 (B) Drilling Contractor O. R. Musslewhite License No. WD99  
 Street and Number Box 56  
 City Hobbs, State New Mexico  
 Drilling was commenced Feb. 9, 1957  
 Drilling was completed Feb 22, 1957

(Plat of 640 acres)

Elevation at top of casing in feet above sea level \_\_\_\_\_ Total depth of well 168  
 State whether well is shallow or artesian Shallow Depth to water upon completion 75

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	85	100	15	Red sand
2	120	135	15	" "
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
14	18	none	0	168	168	none	70,	168

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5 PLUGGING RECORD

Name of Plugging Contractor \_\_\_\_\_ License No. \_\_\_\_\_  
 Street and Number \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_  
 Tons of Clay used \_\_\_\_\_ Tons of Roughage used \_\_\_\_\_ Type of roughage \_\_\_\_\_  
 Plugging method used \_\_\_\_\_ Date Plugged \_\_\_\_\_ 19 \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_

Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor \_\_\_\_\_

FOR USE OF STATE ENGINEER ONLY

Date Received MAY 7 1957

OFFICE  
 CIRCULAR WALL  
 BUREAU OF MINES  
 SHELTON, NEW MEXICO

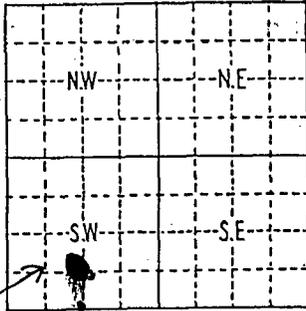
File No. L-1021-Sub-5 Use Jrs Location No. 19.38.14.222

# WELL RECORD

File No. L-845

INSTRUCTIONS: This form should be typewritten, and filed in the office of the State Engineer, (P.O. Box 1079) Santa Fe, New Mexico, unless the well is situated in the Roswell Artesian Basin, in which case it should be filed in the office of the Artesian Well Supervisor, Roswell, New Mexico. Section 5 should be answered only if an old artesian well has been plugged. All other sections should be answered in full in every case, regardless of whether the well drilled is shallow or artesian in character. This report must be subscribed and sworn to before a Notary Public.

**Sec. 1**



(Plat of 640 acres)  
Locate Well Accurately

Owner of well Frank Lehman  
 Street and Number .....  
 Post Office Libby, N. Mex.  
 Well was drilled under Permit No. L-345 and  
 is located in the NE 1/4 SE 1/4 NW 1/4 of Section 14  
 Township 19 Range 38  
 Drilling Contractor L. H. Sheward, Jr.  
 Street and Number Box 348  
 Post Office Livingston, N. Mex.

Drilling was commenced 15 Oct 1947. Drilling was completed 26 Oct 1947.  
 Elevation at top of casing in feet above sea level .....  
 State whether well is shallow or artesian shallow  
 Total depth of well 124 feet.

**Sec. 2**

**PRINCIPAL WATER-BEARING STRATA**

No. 1, from 7.2 to 8.5, Thickness in feet 1.3, Formation quick sand  
 No. 2, from 8.7 to 12.0, Thickness in feet 3.3, Formation water sand  
 No. 3, from ..... to ....., Thickness in feet ....., Formation .....  
 No. 4, from ..... to ....., Thickness in feet ....., Formation .....  
 No. 5, from ..... to ....., Thickness in feet ....., Formation .....

**Sec. 3**

**RECORD OF CASING**

DIAMETER IN INCHES	POUNDS PER FOOT	THREADS PER INCH	NAME OF MANUFACTURER	FEET OF CASING	TYPE OF SHOE	PERFORATED		PURPOSE
						FROM	TO	
<u>1 3/4"</u>	<u>?</u>		<u>?</u>	<u>120</u>		<u>80</u>	<u>120</u>	

**Sec. 4**

**RECORD OF MUDDING AND CEMENTING**

DIAMETER OF HOLE IN INCHES	NUMBER OF SACKS OF CEMENT	METHODS USED	SPECIFIC GRAVITY OF MUD	TONS OF CLAY USED

**Sec. 5**

**PLUGGING RECORD OF OLD WELL**

Well is located in the ..... 1/4 ..... 1/4 ..... 1/4 of Section ....., Township .....,  
 Range ..... Name of plugging contractor .....  
 Street and Number ..... Post Office .....  
 Tons of clay used ..... Tons of roughage used ..... Type of roughage .....  
 ..... Was plugging approved by Artesian Well Supervisor .....

Cement plugs were placed as follows:

No. 1 was placed at ..... feet Number of sacks of cement used .....  
 No. 2 was placed at ..... feet Number of sacks of cement used .....  
 No. 3 was placed at ..... feet Number of sacks of cement used .....  
 No. 4 was placed at ..... feet Number of sacks of cement used .....  
 No. 5 was placed at ..... feet Number of sacks of cement used .....

(OVER)

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Caprock Communications Owner's Well No. \_\_\_\_\_  
 Street or Post Office Address P.O. Box 1560  
 City and State Hobbs, New Mexico 88240

Well was drilled under Permit No. L-10,011 and is located in the:

- a.  $\frac{1}{4}$   $\frac{1}{4}$  NW  $\frac{1}{4}$  NW  $\frac{1}{4}$  of Section 14 Township 19S Range 38E N.M.P.M.  
 b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
 c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.  
 d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46  
 Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 6/13/88 Completed 6/15/88 Type tools Cable Size of hole 10 in.  
 Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 140 ft.  
 Completed well is  shallow  artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
60	135	75	Sand	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
7	22	Welded	0	141	141		75	140

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
 Address \_\_\_\_\_  
 Plugging Method \_\_\_\_\_  
 Date Well Plugged \_\_\_\_\_  
 Plugging approved by: \_\_\_\_\_  
 State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received June 22, 1988 Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
 File No. L-10,011 Use DOMESTIC Location No. 19.38.14.1110

19.38.14.1110

**NOTICE OF PUBLICATION**

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

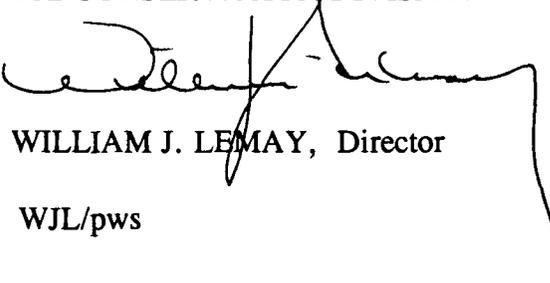
**(GW-236) - Pate Trucking Company, Inc., Mr. Gary Reid, (505)-392-8844, 3800 South Eunice HWY., Hobbs, NM, 88240, has submitted a Discharge Plan Application for their Hobbs facility located in the NW/4 NW/4, Section 14, Township 19 South, Range 38 East, NMPM, Lea County, New Mexico. Any planned discharges or incidental wastes will be collected in a closed top receptacle and disposed of at an OCD approved facility. Groundwater most likely to be affected by a spill, leak, or accidental discharge to the surface is at a depth of approximately 55 feet with a total dissolved solids concentration of approximately 170 mg/L. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.**

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the discharge plan application and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 2nd day of February, 1996.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY, Director

S E A L

WJL/pws

MEMORANDUM OF MEETING OR CONVERSATION

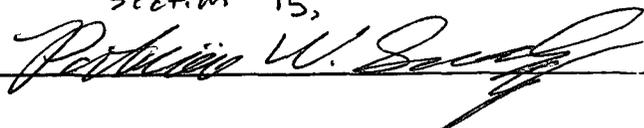
<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time    8:00 AM	Date    2-2-96
<u>Originating Party</u>		<u>Other Parties</u>
Pat Sanchez - OCD		Mr. Wes Root Consultant For Pate
<u>Subject</u> Discharge Plan Application (GW-236)		

Discussion    Mr. Root will have the Entire application and filing Fee in by Monday Feb. 5, 1996. The information submit by Fax yesterday and verbal Groundwater data will serve as instea application so that the public Notice may be issued.

Conclusions or Agreements

Groundwater depth = 55'  
Total Dissolved Solids approximately = 170 mg/L  
- From Groundwater report No. 6  
- Database from state Engineer Section 14, T19S, R38E

Distribution    File,

Signed    Section 15,  


FAX TRANSMISSION

6W-236  
RECEIVED

FEB 1 1996

Environmental Bureau  
Oil Conservation Division

ENVIRONMENTAL SPILL CONTROL, INC.

Phone (505) 392-6167  
Fax (505) 397-5085  
1203 West Dunnam  
P.O. Box 5890  
Hobbs, New Mexico 88241

Date 1-27 1996  
Fax Number 1-505-827-8177  
To Mr. Pat Sanchez NMOC, Santa Fe Office  
With \_\_\_\_\_  
From John Reid  
Page \_\_\_\_\_ of 2 Pages

Message Attached is the Discharge Plan Application  
(Signed by Mr. Reid) For Pate Trucking Co.

District I - (505) 393-6161  
 P.O. Box 1980  
 Hobbs, NM 88241-1980  
 District II - (505) 748-1283  
 811 S. First  
 Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Road  
 Aztec, NM 87410  
 District IV - (505) 827-7131

New Mexico  
 Energy Minerals and Natural Resources Department  
 Oil Conservation Division  
 2040 South Pacheco Street  
 Santa Fe, New Mexico 87505  
 (505) 827-7131

Revised 8/8/95

Submit Original  
 Plus 1 Copy  
 to Santa Fe  
 1 Copy to appropriate  
 District Office

6w-236

DISCHARGE PLAN APPLICATION FOR OILFIELD SERVICE FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

New                       Renewal                       Modification

1. Type: OIL AND GAS EXPLORATION SERVICE COMPANY

2. Operator: Pate Trucking Company, Inc.

Address: 3800 South Eunice Highway, Hobbs, New Mexico 88240

Contact Person: MR. GARY REID - GENERAL MANAGER Phone: 505-392-8844

3. Location: NW 14 NW 14 Section 14 Township T19S Range R38E  
 Submit large scale topographic map showing exact location.

4. Attach the name and address of the landowner of the facility site.
5. Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility.
6. Attach a description of all materials stored or used at the facility.
7. Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8. Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9. Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10. Attach a routine inspection and maintenance plan to ensure permit compliance.
11. Attach a contingency plan for reporting and clean-up of spills or releases.
12. Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
14. CERTIFICATION

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

Name: GARY D. REID Title: Gen. Mgr.

Signature: [Handwritten Signature] Date: 2-1-96

RECEIVED  
 FEB 1 1996  
 Environmental Bureau  
 Oil Conservation Division

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 11:30 AM	Date 1-30-96
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<u>Originating Party</u>	<u>Other Parties</u>
Pat Sanchez - OCD	Mr. Gary Reid - Pate Trucking

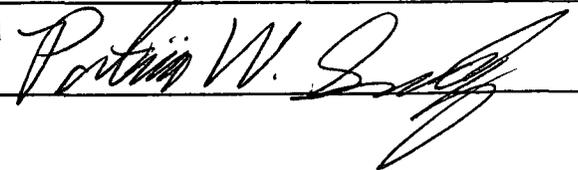
Subject Discharge Plan Application Pate Trucking  
Habbs Yard.

Discussion

I Asked Mr. Reid about the Application and he said his consultant "Environmental Spill Control" (Allen Hodge/Wesley Root) met with him 3-4 weeks ago and should have the Discharge Plan Application put together. I let Mr. Reid know that the 120 day deadline was at hand.

Conclusions or Agreements

Mr. Reid will get with his consultants and see what the hold up is.

<u>Distribution</u> File	Signed 
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OIL CONSERVATION DIVISION

September 26, 1995

**CERTIFIED MAIL**  
**RETURN RECEIPT NO.Z-765-963-066**

Mr. Gary Reid  
Pate Trucking Co.  
P.O. BOX 639  
Hobbs, NM 88241

**RE: Discharge Plan Requirement  
Hobbs Facility  
Lea County, New Mexico**

Dear Mr. Reid:

Under the provision of the Water Quality Control Commission (WQCC) Regulations, Pate Trucking Co. is hereby notified that the filing of a discharge plan is required for the Pate Trucking Co. facilities located at 3800 South Eunice HWY Hobbs, New Mexico.

The discharge plan is required pursuant to Section 3-104 and 3-106 of the WQCC regulations. The discharge plan, defined in Section 1.101.Q of the WQCC regulations should cover all discharges of effluent or leachate at the facility site or adjacent to the facility site. Included in the plan should be plans for controlling spills and accidental discharges at the facility, including detection of leaks in buried underground tanks and/or piping.

Pursuant to Section 3-106.A, a discharge plan should be submitted for approval to the OCD Director within 120 days of receipt of this letter. Three copies of the discharge plan should be submitted.

Mr. Gary Reid  
September 26, 1995  
Page 2

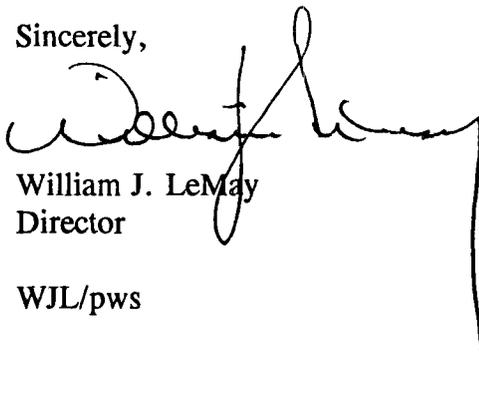
A copy of the regulations and guidelines have been provided to Pate Trucking Co. at a recent field inspection by OCD staff. Enclosed Pate Trucking Co. will find an application form to be used with the guidelines for the preparation of discharge plans at oil & gas service companies. The guideline addresses berming of tanks, curbing and paving of process areas susceptible to leaks or spills and the disposition of any solid wastes.

The discharge plan is subject to the WQCC Regulation 3-114 discharge plan fee. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of fifty (50) dollars plus the flat rate of one thousand, three hundred and eighty (\$1380) dollars for oil & gas service companies. The fifty (50) dollar filing fee is due when the discharge plan is submitted. The flat rate fee is due upon approval of the discharge plan.

Please make all checks payable to: **NMED Water Quality Management** and addressed to the OCD Santa Fe office.

If there are any questions on this matter, please feel free to contact Patricio Sanchez at 827-7156 or Roger Anderson at 827-7152.

Sincerely,



William J. LeMay  
Director

WJL/pws

XC: Mr. Wayne Price and Mr. Jerry Sexton

MEMORANDUM OF MEETING OR CONVERSATION

TELEPHONE X PERSONAL TIME 10:45 (AM) PM DATE 9/26/95

ORIGINATING PARTY: Pat Sanchez  
OTHER PARTIES: Roger Anderson, Mark Ashley. } NMOC

SUBJECT: Discharge Plan Inspections / Reg. letters.

DISCUSSION: DAVIS, MacLuskey, PATE, Hydro test,  
T/C TANK Rentals, AND ROTARY Windline

DISCUSS NEED FOR Discharge Plans.

CONCLUSIONS/AGREEMENTS: All these facilities will be  
required to submit discharge plans.

PATRICIO W. SANCHEZ: *Patricio W. Sanchez*

xc: FILE,

*Roger Anderson*  
*Mark Ashley*

## OIL CONSERVATION DIVISION

September 20, 1995

**CERTIFIED MAIL**  
**RETURN RECEIPT NO.Z-765-963-056**

Mr. Gary Reid  
 PATE TRUCKING CO.  
 P.O. BOX 639  
 Hobbs, NM 88241

**RE: Discharge Plan Requirement Inspection**  
**Hobbs Facility**  
**Lea County, New Mexico**

Dear Mr. Reid

Outlined below are the observations and findings made by the NMOCD team that recently inspected the Pate Trucking Co. facility at 3800 South Eunice HWY in Hobbs, New Mexico.

1. No lab at the facility.
2. Below grade sump present in the shop area.(grease pit)
  - i. Needs to cleaned and inspected yearly and documented.
  - ii. The sump needs to be isolated from the leech line by plugging the sump drain to the leech line and removing that portion of the leech line.
3. Class V. injection well(s) at the facility(i.e.) leech field(s) - these will have to be investigated in order to determine the extent of possible groundwater contamination.

**note:** At the inspection on 9/12/95 Mr. Gary Reid was given a copy of the OCD unlined surface impoundment closure guidelines. The leech field(s) area(s) will have to be sampled - and a work plan for sampling and determining possible contamination will have to be submitted to the OCD Santa Fe office.

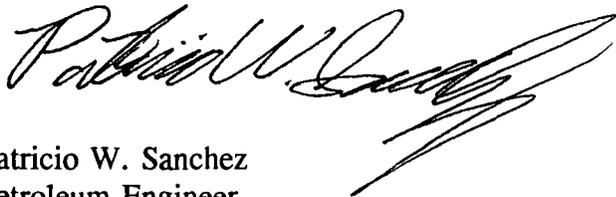
4. Surface impoundments. Future cat fish ponds for employees - will have to bermed so that rainwater from the facility will not drain into the ponds.
5. Provide the NMOCD with a copy of the shop solvent.
6. All tanks, drums, and etc. need to meet OCD guidelines for secondary containment - i.e. fuel area. (This guidelines were provided during the inspection to Mr. Reid.)
7. No written spill contingency plan.

Mr. Gary Reid  
September 20, 1995  
Page 2

8. Painting is done at the facility. Be careful with hazardous solvents.
9. Empty drums, used oil , used filters need to be stored and disposed of in a manner approved by OCD. The current method of draining the filters and using waste management is okay as long as waste management approves. Be careful on used oil storage for periods longer than one year.
10. Items need to be properly and clearly labelled. (i.e. used oil storage tank)
11. Oil contaminated soil(s) need to be cleaned up according to NMOCD spill and leak guidelines - a copy of which was made available by the NMOCD inspectors.
12. It is the recommendation of the OCD that the used oil tank be stored on secondary containment per the discharge plan guidelines that were made available during the inspection.
13. Use the OCD guidelines for constructing the proposed wash pit - submit construction drawings to the NMOCD Santa Fe office for approval. The actual construction of the secondary containment and leak detection needs to be witnessed by Mr. Wayne Price of the Hobbs OCD office.

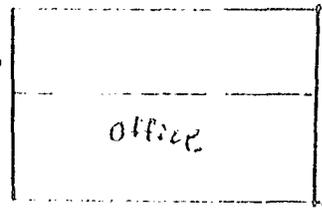
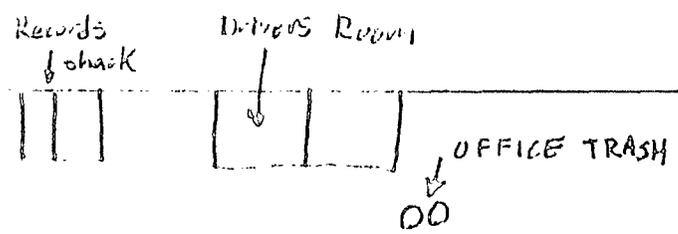
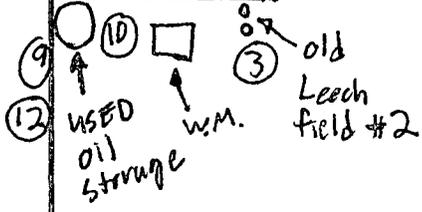
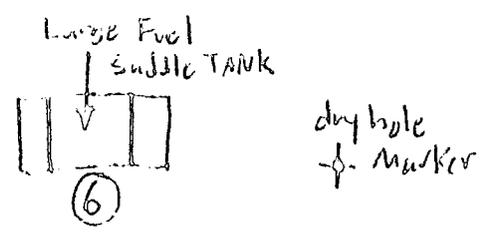
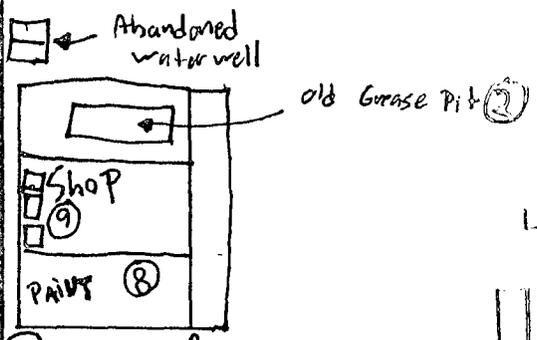
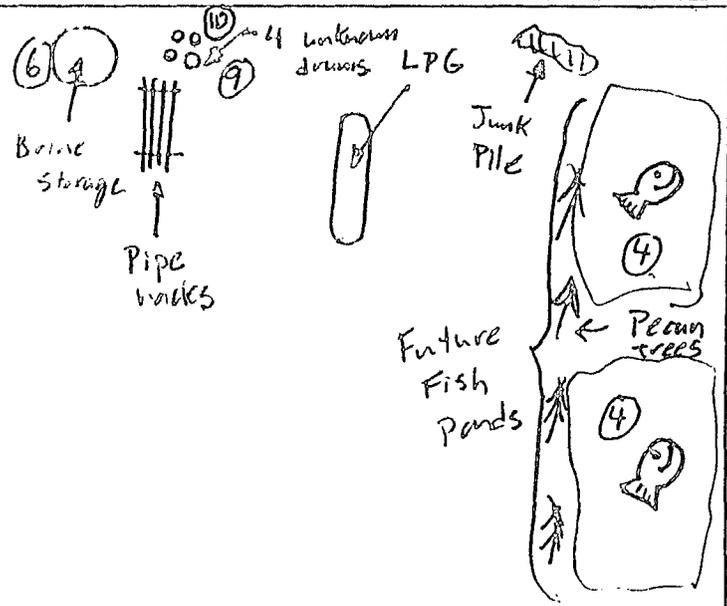
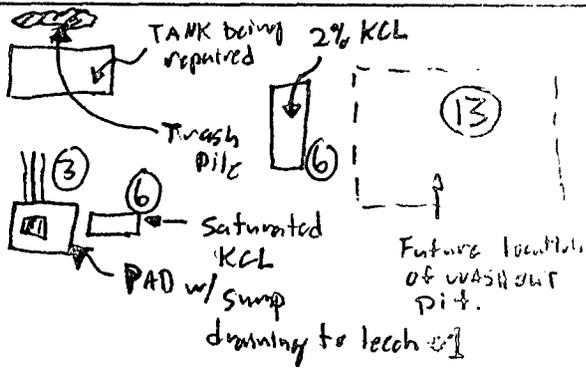
If you have any questions regarding this matter please feel free to call me at (505)-827-7156. See the attached diagram for reference.

Sincerely,



Patricio W. Sanchez  
Petroleum Engineer

xc: Mr. Wayne Price, Mr. Jerry Sexton



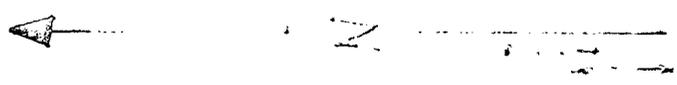
22-141 50 SHEETS  
22-142 100 SHEETS  
22-144 200 SHEETS



(Hobbs)

EUNICE HWY

by *DWS*



Z 765 963 056



**Receipt for  
Certified Mail**

**No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)**

Sent to <b>PATE TRUCKING</b>	
Street and No.	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

Form 3800, March 1993

INSPECTION CHECKLIST FOR OILFIELD SERVICE COMPANIES

FACILITY NAME: PATE TRUCKING CO. OPERATOR: \_\_\_\_\_ DATE: 9/12/95  
 LOCATION: 3800 S RUIZ HWY  
 COMPANY REP(S): GARY REID  
 NMOCD REP(S): WAYNE PRICE MARK ASHLEY PAE SANCHEZ  
 SERVICE COMPANY TYPE: OILFIELD TRUCK CO.

1. LAB PRESENT ( YES  NO )
2. Below grade sumps or tanks. ( YES / NO )
3. Class IV or V Injection well(s). ( YES / NO ) - 2 of them.
4. Surface impoundments (pits) of any kind. ( YES / NO ) - FISH POND
5. Hazardous shop solvents present. ( YES / NO )
6. All tank/drum/fuel/lube oils stored onsite meet OCD guidelines for service company facilities. (i.e. berming and pad and curb type containments.) ( YES /  NO )
7. A written spill contingency plan posted/available and implemented at the facility. ( Can be viewed at the facility by OCD ) ( YES /  NO )
8. Wet paint waste stored at the facility-all paint cans dried before disposal. ( YES / NO ) NA.
9. All wash facilities for vehicles on a pad and curb type containment. ( YES / NO ) NA
10. Maximum volumes: ( YES / NO )
  - A. Chemical type drums < 25 @ 55 gal/drum or an aggregate volume of 1375 gal of chemical product.
  - B. Fuel < 660 gal in above grade tank(s) 10,000 gal
  - C. Used oil < 660 gal in above grade tank(s)
  - D. Lube oil < 660 gal in above grade tank(s)
  - E. Maximum total volume of A thru D < 3355 gal
11. All wastes such as empty drums, buckets, oil filters, and etc stored/disposed by an OCD approved method. ( YES  NO )
12. All items that contain fluids are properly labelled. ( YES  NO )
13. All stormwater contained within the facility. ( YES  NO )

COMMENTS: 1- OLD WATER WELL OPEN HOLE - NORTH PROPERTY LINE -  
1- OLD SUMP WITH LINE GOING TO POSSIBLE CLASS IV & V WELL EAST OF SHOP  
1- OLD SEPTIC WEST OF SHOP  
4- UNKNOWN CHEMICAL DRUMS EAST PROPERTY LINE  
FRESH WATER ST. AT 2905 W MARLAND + PIT CLOSURE!!

- DUMP TRUCKS
- TRANSPORTS
- FORKLIFTS
- BACKHOES
- HOT OIL UNITS
- VACUUM TRUCKS
- KILL TRUCKS
- PIPE HAULING
- PIPE STORAGE
- 486 BBL UPRIGHT
- 210 BBL TEST TANK
- 500 BBL FRAC TANK
- 500 BBL FRAC TANK LINED

**PATE TRUCKING CO.**

P.O. BOX 639 -- HOBBS, NEW MEXICO 88241

1-800-657-9353

OFFICE (505) 397-6264 or 397-6314

FAX (505) 397-2597

GARY REID  
Res (505) 393-4867

MOBILE PHONE  
(505) 397-9531

DATE: 9/12/95 TIME: 4:30 pm

PATE TRUCKING

Mr. Gary Reid

Street Address:

3800 South Eunice HWY.

- Looking at installing a  
washout pit - already has the  
guidelines.

{ 2905 W. Marland }  
{ 2nd yard w/ Soil & }  
{ pit. Needs to submit a }  
{ closure. }

- pit stored on Plastic.

Has a consultant taking care  
of - a report being put together.

- Entire yard on Marland rented  
from Larry Squires.

- ① Sewage - Goes to a Septic  
Tank - Only Sinks Toilets.
- ② Well onsite - okay.

③ Waste Management - Handles Domestic waste

④ Trucks washed - O/S  
Truck wash.

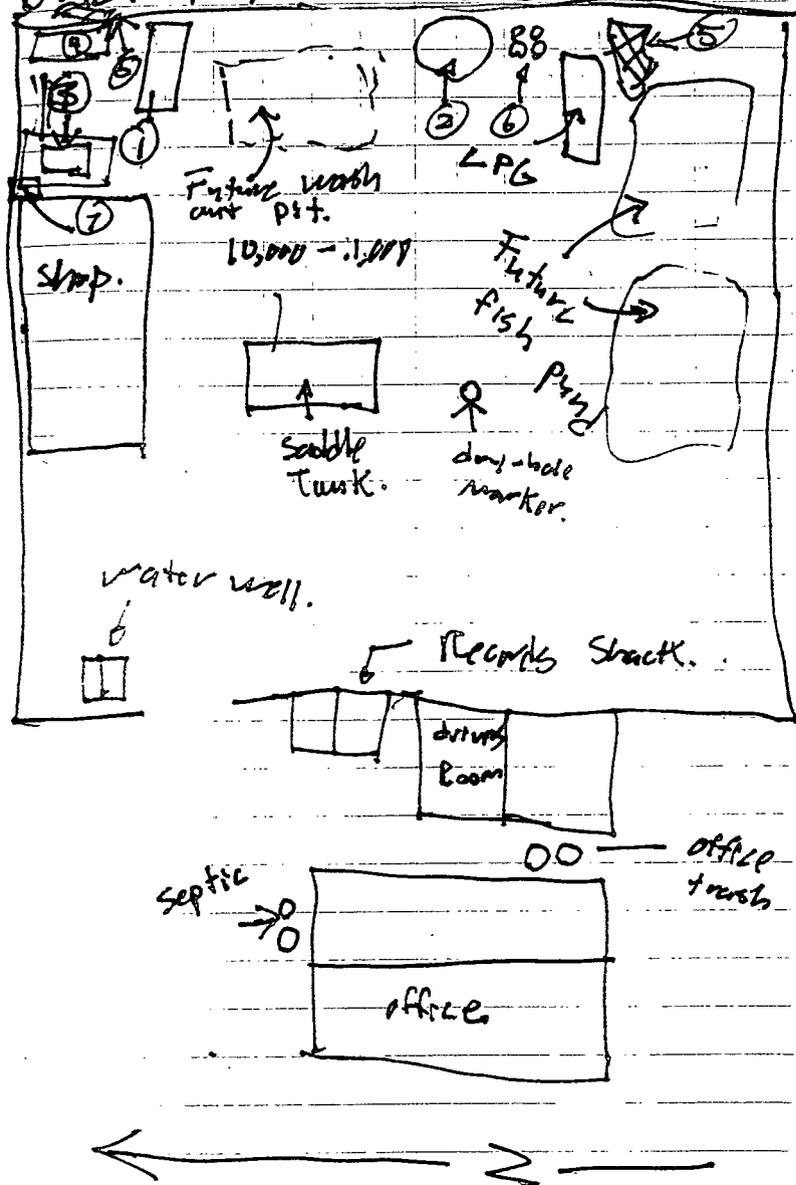
⑤ Grease/oil changed.  
- Used oil stored -  
1,500 gal tank - Has about  
400 gal in it now.  
- Maybe is HAZWASTE issue -

- USED oil Filters - Drained  
24 hours - Then disposed  
of at W.M. dumpster.  
- Already discussed w/ Waste  
Management - Maybe  
2 total / Month.

- Antifreeze -

DATE: 9/12/05

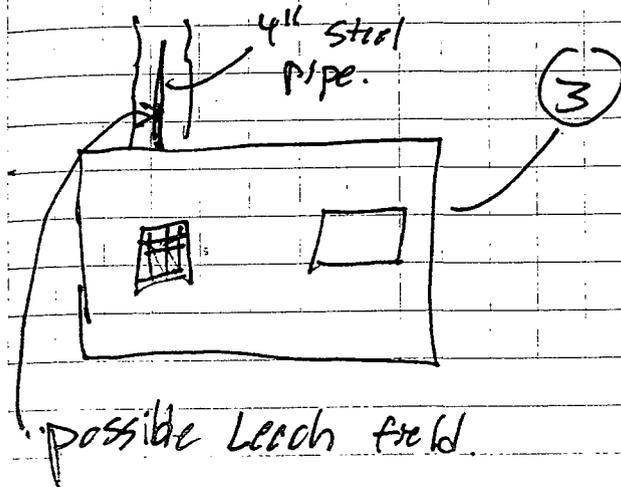
TIME: 4:45 pm.



Question on Saddle Tank -  
does it require  $\frac{1}{3}$  cent.

- (1) 2% KCl water tank.
- (2) Brine Storage.
- (3) Saturated KCl
- (4) TANK being repaired.
- (5) Junk Piles.
- (6) 4 unknown Full chemical drums.
- (7) Old abandon water well.  
- Needs to be plugged  
Put a lock over door.

DATE: 9/12/95 TIME: 5:00



- Needs to be investigated

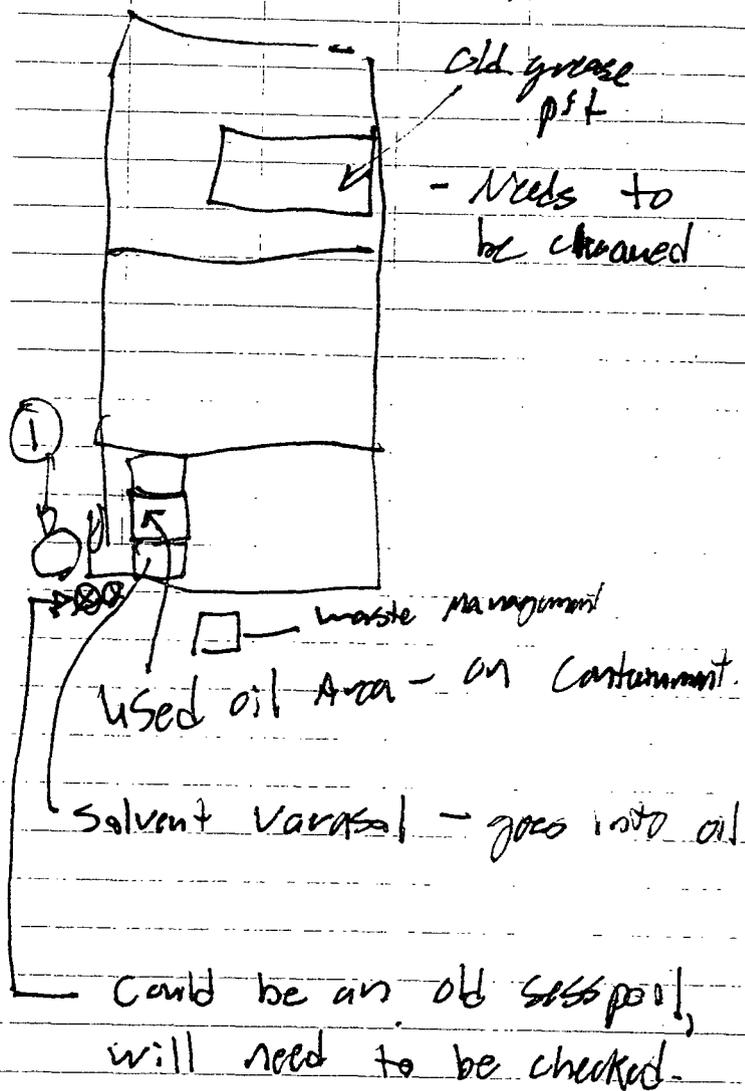
(7)  well needs to be P&A.  
put lock on it

- May require sample.

- used Antifreeze - commingled  
with used oil.

- old batteries - go to Hobbs  
Iron & Metal.

## Shop building



DATE: 9/12/95 TIME: 5:30 pm

Where does paint waste go -

be careful - keep separate from shop wash out pits.

① USED OIL TANK.  
Needs to be labelled as "USED OIL"

Need 2nd. containment  
 $1\frac{1}{2}$  x volume.

Finished up at 6:00 pm

*Pale Trucking Co. Inc.*  
**CILFIELD SERVICES**  
397-6264 397-6314

PATE TRUCKING

9/12/95

PLW



PATE TRUCKING

9112195

PWS

2024 RELEASE UNDER E.O. 14176



PATE TRUCKING

9112195

?WS

NO. 1 (01) 1987 11-14-2000 022



PATE TRUCKING

9/12/95

PWS

040.24014182 NNN-1540 822







PATE TRUCKING

9/12/95

PWS



PATE TRUCKING

9/12/95

PLS

010 SEP 14 01 1995 1100 032



PATE TRUCKING

9112195

PLWS

2025-11-11 10:41:03 AM



PATE TRUCKING

9/12/95

PLS



PATE TRUCKING

9/12/95

PWS

0-70/14-02 NON-2280 1022