

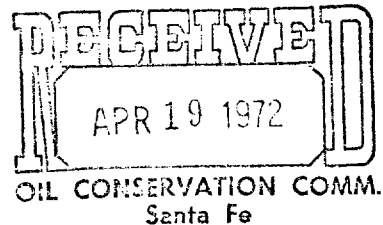
# TENNECO OIL COMPANY A Tenneco Company

SUITE 1200 • LINCOLN TOWER BUILDING • DENVER, COLORADO 80203



April 14, 1972

Mr. A. L. Porter, Jr.  
Secretary - Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501



RE: WATER INJECTION - HOSPAN #51 & #52  
UPPER HOSPAN UNIT  
MCKINLEY COUNTY, NEW MEXICO

WFX - 363  
4

Dear Sir:

Tenneco Oil Company, as operator of the Upper Hospah Unit, respectfully submits application for administrative approval to inject water into the Upper Hospah Sand through the Hospah #51 and #52. In support of this request, we are enclosing the following:

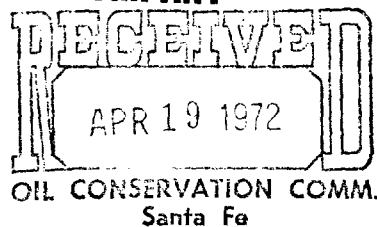
- (1) A well location plat showing the location of the proposed wells and all operators and wells within a two mile radius.
- (2) Copies of Form 9-331-C filed with the USGS showing the location and prognosis for said wells.
- (3) Schematic of proposed well showing casing size, cement tops, and approximate elevations.
- (4) A copy of the performance curve on the Upper Hospah Sand showing monthly oil and water production and water injection.

Authority to inject water into the Upper Hospah Sand was originally granted to Tenneco by Commission Order No. R-3325.

The area in which the proposed injection wells will be located is not currently being swept by existing patterns. The expected flood patterns of the two wells is shown on the well location plat.

By copy of this letter, Tesoro petroleum Corporation, the only offset operator, is being notified of our intention to inject water into the hospah #51 and #52.

**TENNECO OIL COMPANY**



Mr. A. L. Porter, Jr.  
April 14, 1972  
Page 2

Your approval will be appreciated.

Respectfully submitted,

TENNECO OIL COMPANY

A handwritten signature in cursive script, appearing to read "R. A. Williford".

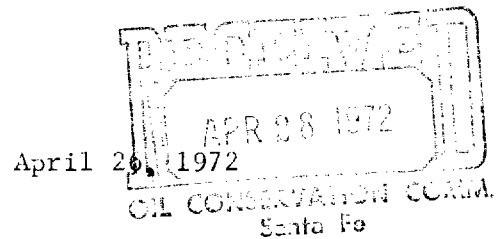
R. A. Williford  
District Production Manager

WEB/lj  
Attachments

cc: Mr. O. L. Smith  
Tesoro Petroleum Corporation  
8520 Crownhill Blvd.  
San Antonio, Texas 78209

**TENNECO OIL COMPANY** *A Tenneco Company*

SUITE 1200 • LINCOLN TOWER BUILDING • DENVER, COLORADO 80203



Mr. James E. Katteina  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

RE: Tenneco's Application  
to inject water into the  
Hospan #51 and #52  
McKinley County, New Mexico

Dear Sir:

In conjunction with the captioned application made April 14, 1972, enclosed please find three (3) copies of the Well Location and Acreage Dedication Plat on the captioned wells.

If any further assistance is necessary in processing the application, please contact me.

Yours very truly,

TENNECO OIL COMPANY

*W. L. Babyak*  
W. L. Babyak  
Petroleum Engineer

WLB/lj

Attachments

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACERAGE DEDICATION PLAT

RECEIVED  
APR 28 1972

All distances must be from the outer boundaries of the Section

OIL CONSERVATION COMM.

Operator <b>TENNECO OIL COMPANY</b>		Lease <b>HOSPAN</b>		State Well No. <b>92</b>	
Unit Letter <b>C</b>	Section <b>12</b>	Township <b>22 NORTH</b>	Range <b>9 WEST</b>	County <b>Mc KINLEY</b>	
Actual Footage Location of Well: <b>720</b> feet from the <b>WEST</b> line and <b>1850</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>7043.0</b>	Producing Formation <b>San Juan</b>	Pool <b>San Juan</b>	Dedicated Acreage: <b>5.0</b>		Acres

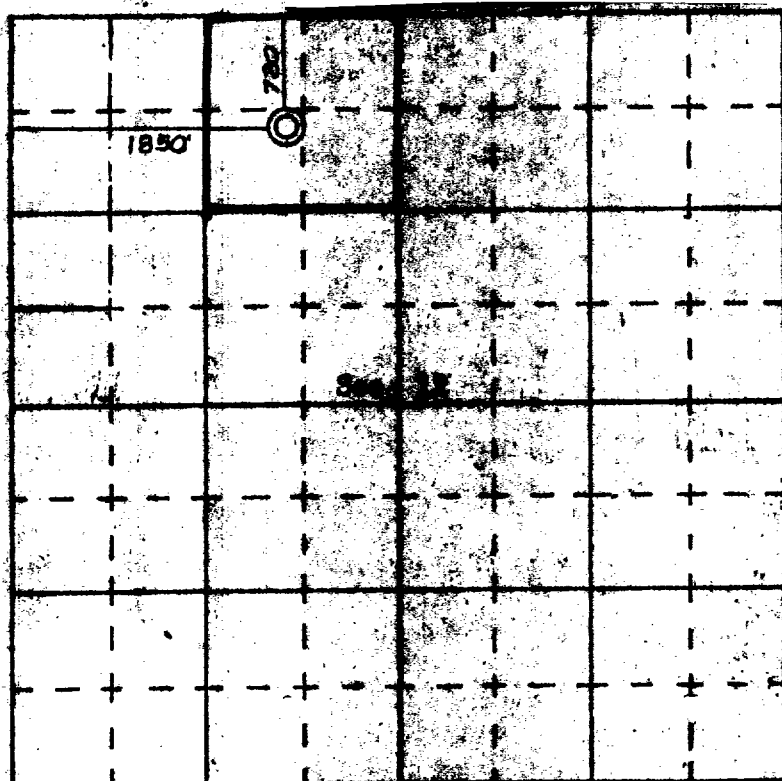
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, forced pooling, or otherwise?

( ) Yes ( ) No If answer is "yes" type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced pooling, or otherwise) or until a new dedication plat, eliminating such interests, has been approved by the Commission.

ILLEGIBLE



SCALE—4 INCHES EQUALS 1 MILE

SAN JUAN ENGINEERING COMPANY, ALBUQUERQUE, N. M.

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name **G. A. Ford**

Position **Sr. Production Clerk**

Company **Tenneco Oil Company**

Date **4/24/72**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date **12**  
Professional Engineer  
and Surveyor  
**JAMES P. LEESE**  
NEW MEXICO  
JAMES P. LEESE

# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

**RECEIVED**  
APR 28 1972  
OIL CONSERVATION COMM.

All distances must be from the outer boundaries of the Section

Operator <b>TERRACE OIL COMPANY</b>		Lease <b>ROSPAN</b>		Santa Fe Well No. <b>51</b>	
Section <b>12</b>	Range <b>9 West</b>	County <b>McKinley</b>			
Actual Footage Location of Well: <b>1775</b> feet from the <b>ROSPAN</b> end <b>680</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>7073.0</b>	Producing Formation <b>San Juan</b>	Pool <b>San Juan</b>	Dedicated Acreage <b>40</b>		Acres

1. Outline the acreage dedicated to the well by colored pencil or hatch marks on the plot below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, forced pooling, etc?

Yes ☒ No ☐ If answer is "yes" type of consolidation \_\_\_\_\_

If answer is "no" list the names and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced pooling, or otherwise) or until a non standard well eliminating such interests has been approved by the Commission.

**ILLEGIBLE**

## CERTIFICATION

I hereby certify that the information contained hereon is true and complete to the best of my knowledge and belief.

Name **G. A. Ford**

Position **Production Clerk**

Company **Terrace Oil Company**

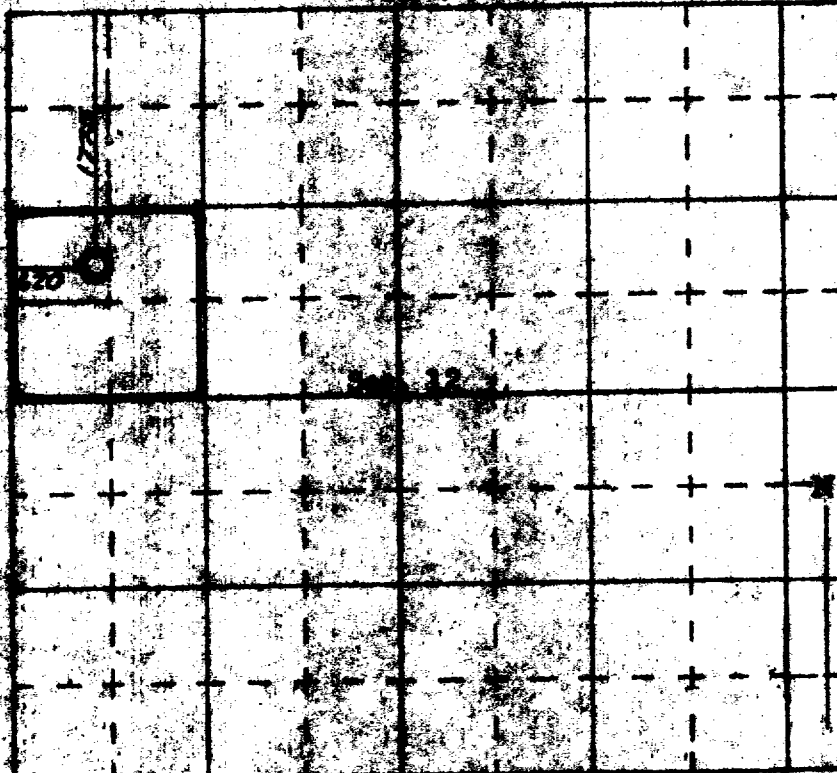
Date **4/24/72**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Signed **4/24/72**

Signature of Professional Engineer or Surveyor **[Signature]**

Certificate No. \_\_\_\_\_



SCALE - 1 INCHES EQUALS 40 ACRES

SAN JUAN COUNTY, NEW MEXICO

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐ PLUG BACK ☐

b. NAME OF WELL

WELL NO.

WELL NO.

WATER TABLE

WELL NO.

WELL NO.

2. NAME OF OPERATOR

Tenneco Oil Company

3. ADDRESS OF OPERATOR

Suite 1200 Lincoln Tower Bldg-Denver, Colo. Santa Fe

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1775' F/NL and 620' F/NL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

15. LOCATION OF WELL

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

1650

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7073 GR

22. APPROX. DATE WORK WILL START\*

23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24	65	Suff. to circulate
7-7/8"	5-1/2"	15.5	1650	Suff. to fill 500' above shallowest pay zone

Drill 12-1/4" hole to 65', run 8-5/8" 24# surface casing and cement to surface. Drill out with 7-7/8" hole to approximate T.D. of 1650', then, run 5-1/2" casing to T.D. and cement as required. Perforate casing and treat formation for water injection. Hook up well for injection. Test B.O.P. each 24 hours.

Note: Certified Plat to follow.

ILLEGIBLE

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE Sr. Production Clerk

DATE 4/13/72

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL ☐GAS ☐Geothermal Water Injection ☐

## 2. NAME OF OPERATOR

Tennessee Oil Company

## 3. ADDRESS OF OPERATOR

Suite 1200 Lincoln Tower Bldg-Denver, Colo.

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

720' F/WL and 1850' F/WL

Santa Fe

At proposed prod. zone

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest dgm. unit line, if any)

## 18. DISTANCE FROM PROPOSED\* LOCATION\*

TO NEAREST WELL (If not completed,

OR APPLIED FOR, Casing Depth, FT.)

## 16. NO. OF ACRES IN LEASE

## 19. PROPOSED DEPTH

1650

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Specify whether D.P., H.T., G.L., etc.)

## 22. APPROX. DATE WORK WILL START\*

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	20	65	Suff. to circulate
8-1/2"	5-1/2"	15.5	16.50	Suff. to fill 500' above shallowest pay zone

Drill 12-1/4" hole to 65', Run 8-5/8" 20# surface casing and cement to surface. Drill out with 7-7/8" hole to approximate T.D. of 1650'. Log, run 5-1/2" casing to T.D. and cement as required. Perforate casing and test formation for water injection. Hook up well for injection. Test B.O.P. each 24 hours.

Note: Certified Plat to follow.

ILLEGIBLE

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

S. A. Ford

TITLE

Sr. Production Clerk

DATE

4/13/72

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

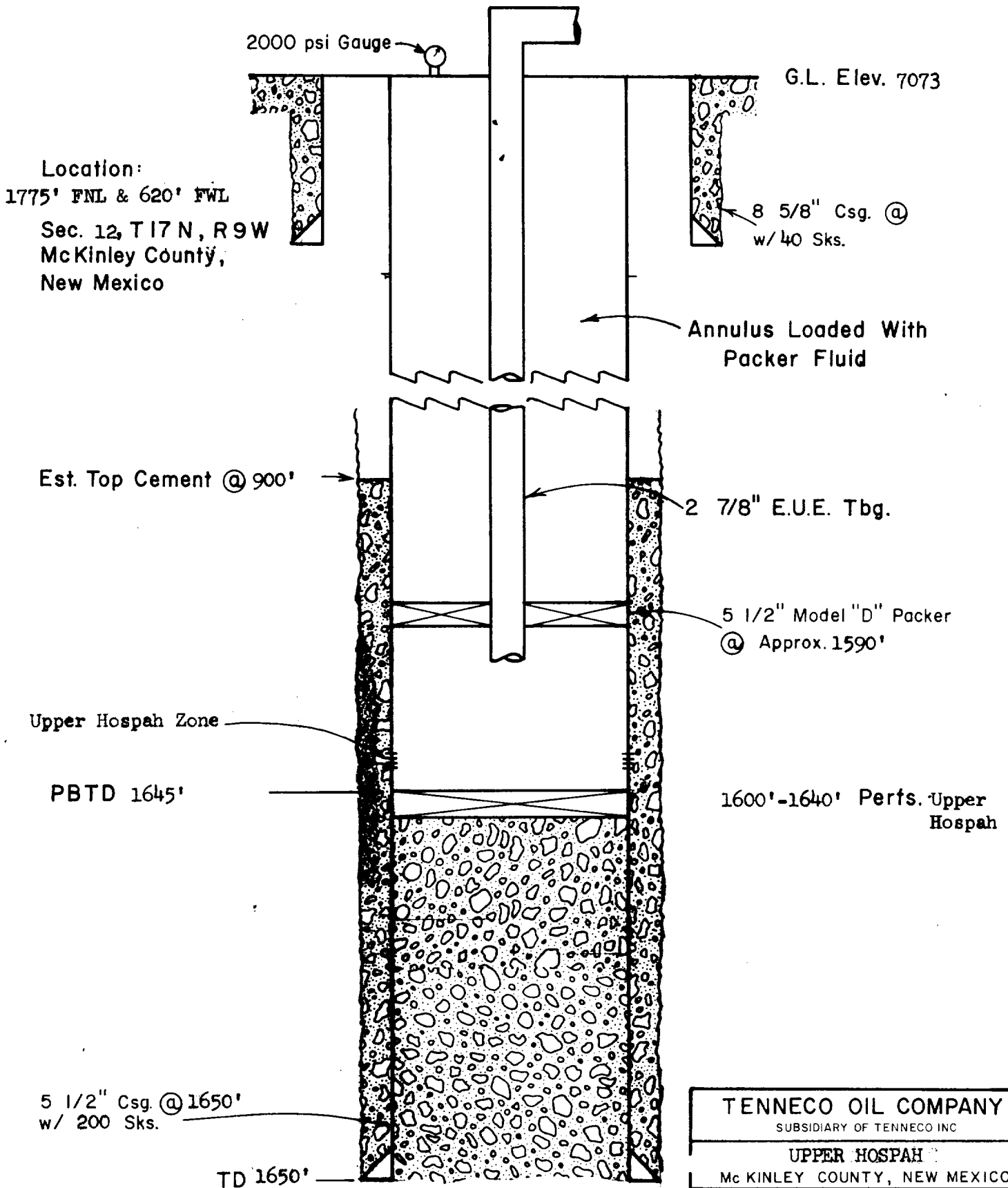
APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

K.B. Elev. 7084



All Measurements Based On Gamma Ray Log

TENNECO OIL COMPANY

SUBSIDIARY OF TENNECO INC

UPPER HOSPAH

Mc KINLEY COUNTY, NEW MEXICO

SCHEMATIC DIAGRAM OF  
PROPOSED W/INJECTION WELL

HOSPAH WELL NO. 51

W.E.B.

SCALE - NONE



K.B. Elev. 7054

Location:  
720' FNL & 1850' FWL  
Sec. 12, T17 N, R9 W  
McKinley County,  
New Mexico

2000 psi Gauge

G.L. Elev. 7043

8 5/8" Csg. @  
w/ 40 Sks.

Annulus Loaded With  
Packer Fluid

Est. Top Cement @ 900'

2 7/8" E.U.E. Tbg.

5 1/2" Model "D" Packer  
@ Approx. 1590'

Upper Hospah Zone

PBTD 1645'

1600'-1640' Perts. - Upper  
Hospah

5 1/2" Csg. @ 1650'  
w/ 200 Sks.

TD 1650'

All Measurements Based On Gamma Ray Log

TENNECO OIL COMPANY

SUBSIDIARY OF TENNECO INC.

UPPER HOSPAH FIELD

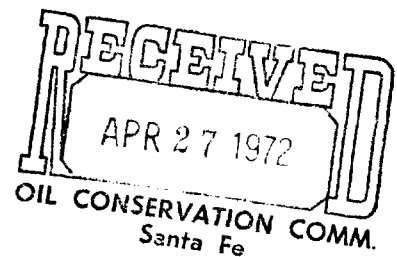
McKINLEY COUNTY, NEW MEXICO

SCHEMATIC DIAGRAM OF  
PROPOSED W/INJECTION WELL

HOSPAH WELL NO. 52

W.E.B.

SCALE - NONE



April 17, 1972

Mr. A. L. Porter, Jr.  
Secretary - Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Tenneco Oil Company's application  
to inject water through the  
Hospah #51 and #52  
Upper Hospah Unit  
McKinley County, New Mexico

Dear Sir:

I, Harold Vagtborg, Jr., Vice President of  
Tesoro Petroleum Corporation have received a copy of Tenneco's application  
for administrative approval to inject water into the captioned wells. As  
the only offset operator, Tesoro Petroleum Corporation hereby waives objection  
to the Tenneco application.

Yours very truly,

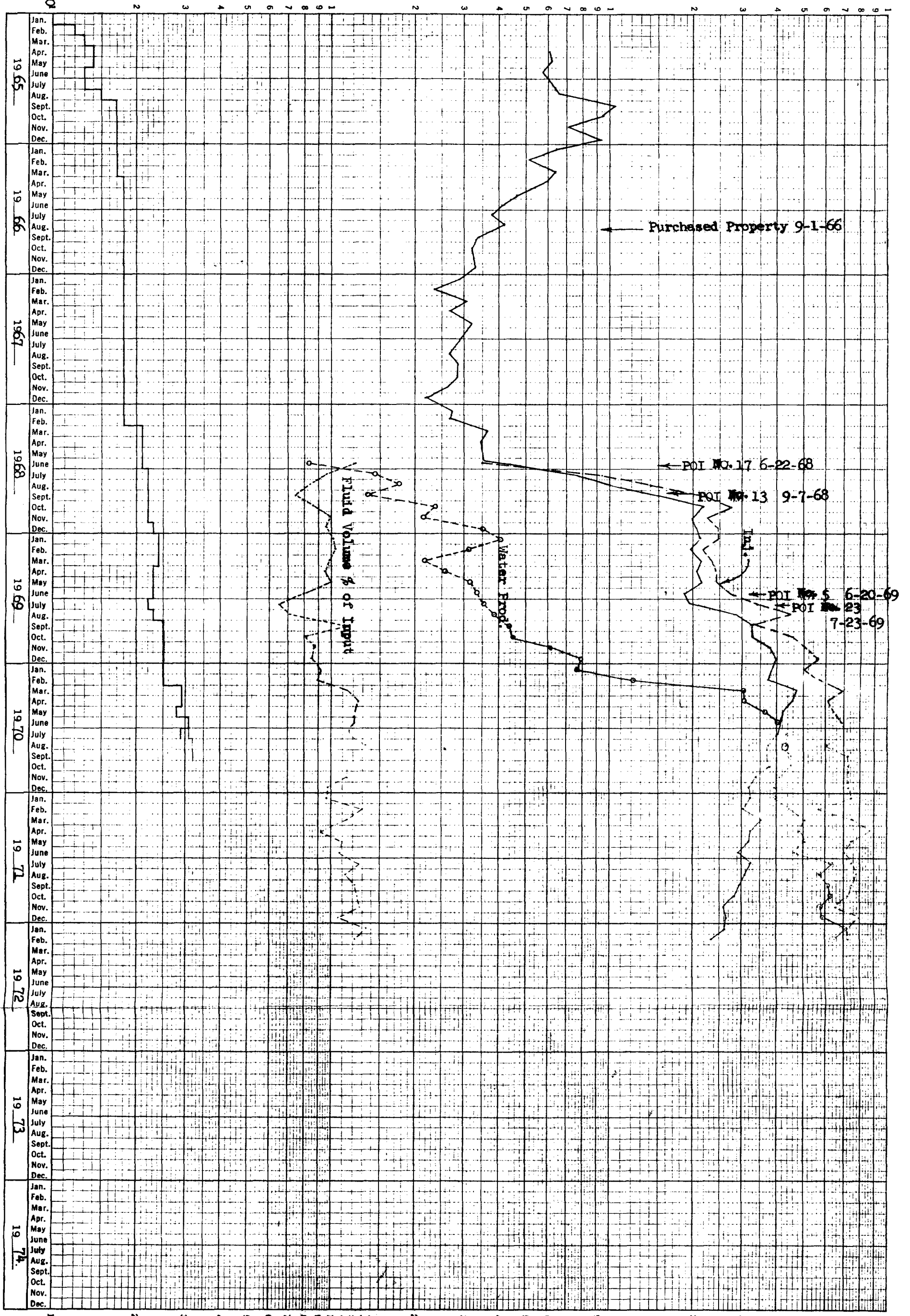
TESORO PETROLEUM CORPORATION

A handwritten signature in cursive script that reads "Harold Vagtborg, Jr." The signature is written over a horizontal line.

WLB/lj

No. of Prod. Wells

MBLS Per Month



Per Cent

Source: Houston Unit