

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: Secondary Recovery Pressure Maintenance Storage
Application qualifies for administrative approval yes no

II. Operator: Tenneco Oil E&P, WRMD
Address: Box 3249, Englewood, CO 80155
Contact party: Alex McLean Phone: 740-2582

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? yes no
If yes, give the Division order number authorizing the project R3325

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

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: Alexander Mark McLean Title Production Engineer

Signature: Alexander Mark McLean Date: February 11, 1983

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Memo

From
Gilbert P. Quintana
Petroleum Engineer

To File / WFX-

Conversations with Alex McLean on 4/20/83 at @ 11:00 A.M. indicate he will send me proof of offset producer notification within the next few days. Approval of the application is contingent on him providing this information.

Also, he indicates wells No. 77 & 79 offsetting to the north of the lease are wells drilled prior to institution of the subject waterflood and should be included in the original order.

Gilbert Quintana

FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

VII. 1. Proposed average and maximum daily rate of fluids to be injected:

Proposed average daily rate: Initially, to be limited to 25 BWIPD.
Maximum daily rate = 1200 BWIPD

2. System is to be closed.

3. Average Inj. pressure = 650 psi.

Maximum Inj. pressure = 800 psi.

4. Injection fluid will be produced water.

5. This well is not for disposal purposes.

IX. Stimulation program will initially consist of nothing, but at a later date Hospah #18 may be stimulated w/some MCA.

XII. Not applicable.

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77.

26
5/362

27
81

39
5/15

42
81

41
78A

29
15/47

28
6/568
81

35
81

1/2 mile radius

20
81

79

SFRRA "A"

31
9/428

5
790 @ 640

18
10/106

9/4 @ 260

17
520 @ 460

19
16/428

LOWER HOSPAP PILOT WELLS

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78A



TENNECO OIL COMPANY
SUBSIDIARY OF TENNECO INC.



SOUTH HOSPAP FIELD
MC KINLEY CO., NEW MEXICO

UPPER HOSPAP SAND UNIT

ATTACHMENT NO. 2



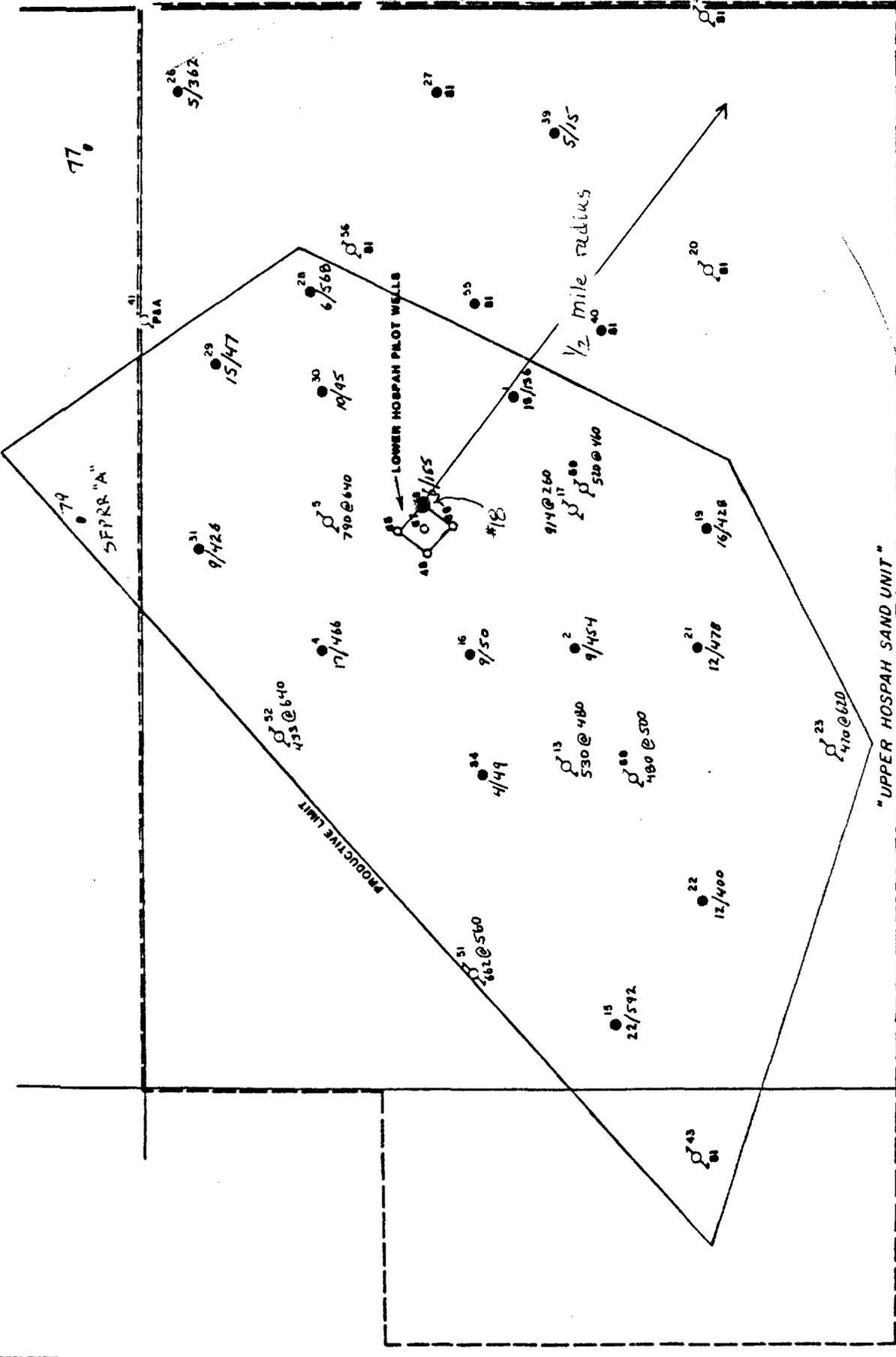
R 9 W

"UPPER HOSPAP SAND UNIT"

PRODUCTIVE LIMIT

8000/2000

8000 @ 1000-1500



WF7-511

Tenneco Oil Exploration and Production

A Tenneco Company

Western Rocky Mountain Division

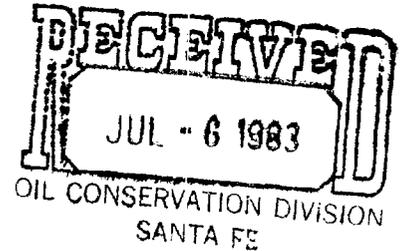
P.O. Box 3249
Englewood, Colorado 80155
(303) 740-4800

Delivery Address:
6061 South Willow Drive
Englewood, Colorado



June 30, 1983

State of New Mexico Oil & Gas Conservation Commission
Santa Fe District Office
P. O. Box 2088
Santa Fe, New Mexico 87501



Attention: Mr. Gilbert Quintana

Re: Hospah #18

Gentlemen:

We have enclosed a copy of the proof of publication concerning water injection for the above-referenced well. The offset operator has been notified. A copy of our Certified Mail receipt is also enclosed.

If you need additional information, please contact this office.

Very truly yours,

TENNECO OIL COMPANY

A handwritten signature in cursive script that reads "John Orr".

John Orr
Production Analyst

JWO:csh

Enclosure

Notepad #18

PS Form 3811, Oct. 1980

● **SENDER:** Complete items 1, 2, 3, and 4.
Add your address in the "RETURN TO" space on reverse.

(CONSULT POSTMASTER FOR FEES)

1. The following service is requested (check one).
 Show to whom and date delivered —¢
 Show to whom, date, and address of delivery.. —¢

2. **RESTRICTED DELIVERY** —¢
(The restricted delivery fee is charged in addition to the return receipt fee.)

TOTAL \$ _____

3. **ARTICLE ADDRESSED TO:**
 Tesoro Petroleum Corp.
 Box 2369
 Farmington, NM 87401

4. **TYPE OF SERVICE:** **ARTICLE NUMBER**
 REGISTERED INSURED
 CERTIFIED COD
 EXPRESS MAIL

P 269 935 897

(Always obtain signature of addressee or agent)

I have received the article described above.
SIGNATURE Addressee Authorized agent

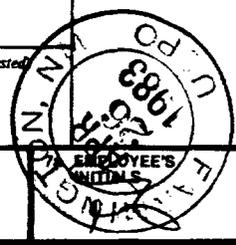
David L. Collis

5. **DATE OF DELIVERY** **POSTMARK**
 4-26-83

6. **ADDRESSEE'S ADDRESS** *(Only if requested)*

7. **UNABLE TO DELIVER BECAUSE:**

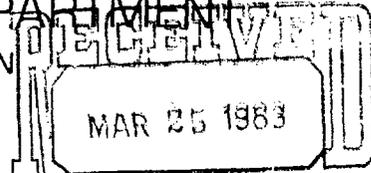
RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL





STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE



OIL CONSERVATION DIVISION, AZTEC, NEW MEXICO 87410
SANTA FE
1000 RIO BRAZOS ROAD
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 3-23-83

FILE WFX-511

- RE: Proposed MC _____
- Proposed DHC _____
- Proposed NSL _____
- Proposed SWD _____
- Proposed WFX _____
- Proposed PMX _____

Gentlemen:

I have examined the application dated 3-8-83
 for the Tenneco South Hensch Unit #18 6-12-17N-9W
 Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve with maximum injection pressure of 311 psi.

Yours truly,

Jeff A. Edmister