Tenneco Oil Exploration and Production

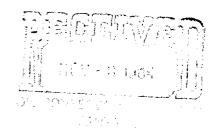


A Tenneco Company

Eastern Rocky Mountain Division P.O. Box 3119 Englewood, Colorado 80155 (303) 740-4800

Delivery Address: 6162 South Willow Drive Englewood, Colorado

November 5, 1984



New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, NM 87501 Attention: Joe Ramey

State of New Mexico Oil & Gas Conservation Commission 1000 Rio Brazos Road Aztec, NM 87410

> RE: Application for Authorization to Inject Hospah #55 Unit G, Sec. 12, T17N, R9W McKinley County, New Mexico

Gentlemen:

Attached you will find our Application for Authorization to Inject for the purpose of secondary recovery, including supportive information for the referenced well. The offset operators have been notified by mail of this application.

Please contact this office if you require additional information.

Very truly yours.

TENNECO OIL COMPANY

Scott McKinney

Sr. Regulatory Analyst

SMc:srp Attachment

cc: Alex McLean

OIL CONSERVATION DIVISION

POST OFFICE BOX 2018 STATE LAND OFFICE BUILDING BANTA FE NEW MEXILO 97501

FURM L-108 Revised 7-1-81

| APPL | TRATION | FOR | AUTHORIZATION TO INJECT | |
|--------|---------|-----|-------------------------|--|
| MI C L | | run | AUTRURIZATION TO TRAIL | |

| I. | Purpose: Secondary Recovery Pressure Maintenance Dispersi Storage Application qualifies for administrative approval? Zyes Inc | | | | | |
|------|--|--|--|--|--|--|
| II. | Operator: Tenneco Oil E & P. WRMD | | | | | |
| ٠ | Address: P.O. Box 3249, Englewood, CO 80155 | | | | | |
| | Contact party: Eric Matheson Phone: (303) 740-4800 , Ext. | | | | | |
| 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? \(\textbf{X} \) yes \(\textbf{D} \) no \(\text{R3325} \) . | | | | | |
| ٧. | 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: | | | | | |
| | Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and 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.). | | | | | |
| III. | Attach appropriate geological data on the injection zone including appropriate lithologi 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. | | | | | |
| х. | 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. | | | | | |
| 111. | 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 correcto the best of my knowledge and belief. | | | | | |
| | Name: Eric W. Matheson Title Gramer Signature: Gree W McHeson Date: Sept 10 1984 | | | | | |
| | Signature: Cur U Walliam Date: Part 10 1984 | | | | | |

of the earlier submittal. April 19, 1983 - Application for Hospah

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 parker 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

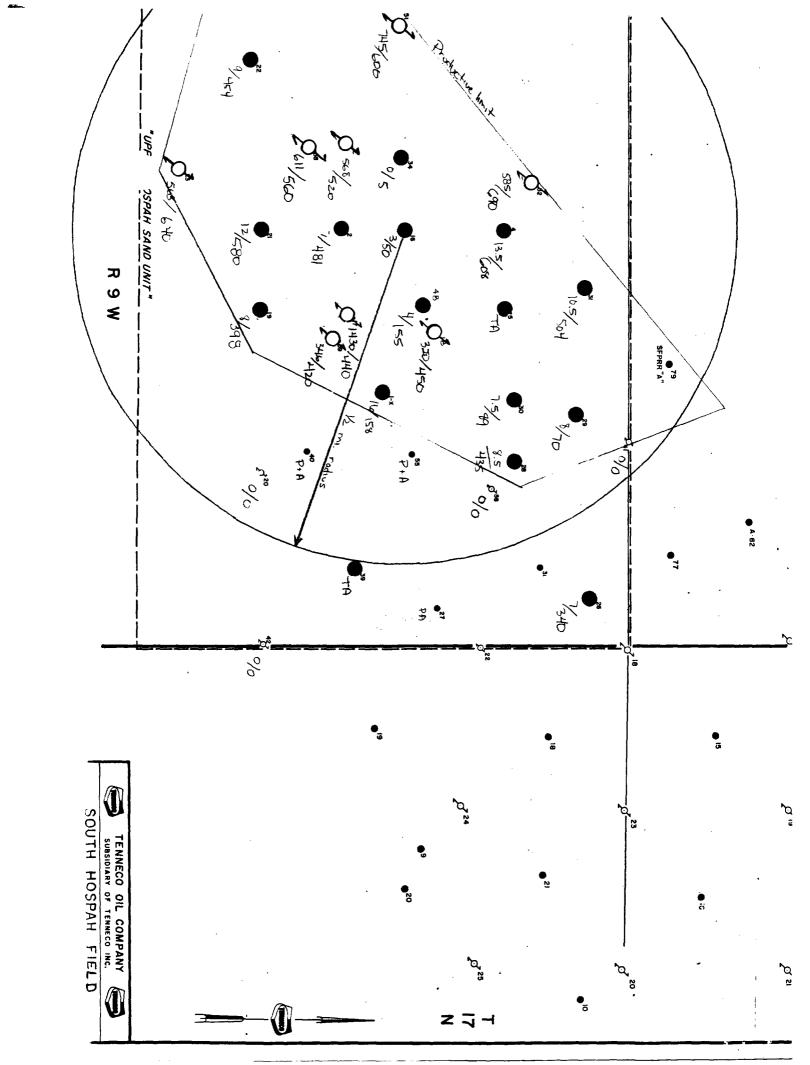
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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.



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 <u>not</u> for disposal purposes.
- IX. Stimulation program will initially consist of nothing, but at a later date Hospah #55 may be stimulated w/some MCA.
- XII. Not applicable.

INJECTION WELL DATA SHEET

| enneco Oi | il E&P | UPPER HOSPAH | | · |
|--|--|--------------------------------------|-------------------------------------|-------------------|
| | 1755' FNL, 1515'FEL | | 17M | 9.1 |
| L NU. | FUOTAGE LOCATION | SECTION | TOWNSIILP | RANGE |
| | | • | obulor Data | |
| | | Surface Casing | ubulur vata | |
| | | Size 9-5/8" (36#/ft | Compand with | . 00 |
| | | | | |
| | | TOC <u>Surface</u> | | |
| | | Hole size 12 | -1/4" | |
| 11 | | Intermediate Casing | | |
| | E- 9 5" (5g | Size | | |
| | $ \cdot \cdot $ | 10C | feet determined by | ··· |
| | | Hole size | | |
| | | Long string | | |
| 4 | Der 100' | Size $7'' (20\frac{\pi}{7}/ft)$ | Cemented with | 100 |
| | | TOC | Foot determined by | |
| | tz7 (89 | Hole size8_ | 3/4" | • |
| | 2 7 tha. | Hole size 8- Total depth .15 | 83' | |
| | \mathcal{O} | Injection interval | | |
| | | • | to 1573 | feet |
| the state of the s | | 1543 feet (perforated or open-hi | ole, indicate which) | |
| 1 | | 1543-1573 vi/2 JSPF | • | |
| | Baker Packer Model AD- tension pk © 1500 Pers (1543-15) PBTD © 1577 TD, 1583 | 1. | | |
| ng size | 2-7/8# (6.5#/ft)lined | s with | | set in s |
| | | /*** | rial) at1500 | feet |
| | AD-1, 7" tension | | , | |
| • | e any other casing-tubing | 3 8681). | | |
| Deta | | Unnar Hospah | | |
| | the injection formation | | nah - Unnon Cand | |
| | Field or Pool (if applie | | /W No | ~ |
| | a new well drilled for it for what purpose was the | | — ' | oil |
| 11 no, | int must bulbose was the | west attainers? attric | | |
| Na. 44. | well ever been perforate | ed in any other zone(s) | ? List all such per | Forated intervals |
| and giv | e plugging detail (sacks | of cement or bridge pl | ug(s) used) No | |
| | | • | | |
| | | | | |
| | | | | |
| Give th | e depth to and name of a | ny pveilying and/or und | crlying oil or gas zo ta (2500°) | ones (pools) in |
| Give th this sr | e depth to and name of a ea. <u>lower Hospah (16</u> | ny averlying and/or und ĎQ¹)Dako: | crlying oil or gas re | ones (pools) in |



STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

1000 RID BRAZOS ROAD AZTEC, NEW MEXICO 87410

| DIL CONSERVATION DIVISION BOX 2088 SANTA FE, NEW MEXICO 87501 | (505) 334-617B |
|--|------------------------------|
| DATE 12-7-84 | |
| RE: Proposed MC Proposed DHC Proposed NSL Proposed SWD Proposed WFX Proposed PMX SANTA IS | (ISION |
| Gentlemen: | |
| I have examined the application dated $11-8-89$ | |
| for the January Co. Hospith #16 F-1. Operator Lease and Well No. Uni | <u>2-17N-7W</u> it, S-T-R |
| and my recommendations are as follows: | |
| Affrance = | |
| note correct name is actually Do. | s Her |
| Affrance: The france: The correct name is actually So. Hespah Unit #40 | |
| | |
| Yours truly, | |
| In Best | |



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

T WFX -53

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

1000 RID BRAZOS RDAD AZTEC, NEW MEXICO 87410 (505) 334-6178

| OIL CONSERVATION DIVISION BOX 2088 SANTA FE, NEW MEXICO 87501 | · · · · · · · · · · · · · · · · · · · | · · |
|---|---------------------------------------|------------------------------|
| DATE 12-7-84 | ٠. | St. Say |
| RE: Proposed MC | July OF CONST. | C. 1: 1301 EVATION DIVISION |
| Gentlemen: | | |
| I have examined the application dated | 11-8-84 | |
| for the fluxers cells. Head | e And Well No. | #-12-1711-90 Unit, S-T-R |
| and my recommendations are as follows: | | |
| Approve: | | |
| Moto Correct name | is astratly | South |
| Korpah Hut & 40 | <i></i> | |
| , | | |
| | | |
| Yours truly, | | |
| In Bul | | |



STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD

AZTEC, NEW MEXICO B7410 505) 334-61**78** OIL CONSERVATION DIVISION BOX 2088 SANTA FE, NEW MEXICO 87501 DATE 12-7-84 RE: Proposed MC Proposed DHC Proposed NSL Proposed SWD Proposed WFX Proposed PMX Gentlemen: I have examined the application dated and my recommendations are as follows: Also the unit latter is H Yours truly,