August 28, 1985

New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Order #R-2807-C
Expand Teritory Project by
Addition of Hospah Sand
Unit Injection Wells

Gentlemen:

Tesoro Petroleum Corporation requests administrative approval to add injection wells to the Hospah Upper Sand Oil Pool, in accordance with Order #R-2807-B.

We seek approval for injection of produced water into the following wells:

Hospah Sand Unit # 17:	1650' FNL & 330' FEL, Sec 36-T18N-R9W
Hospah Sand Unit # 27:	990' FSL & 1650' FEL, Sec 36-T18N-R9W
Hospah Sand Unit # 37:	990' FSL & 990' FEL, Sec 36-T18N-R9W
Hospah Sand Unit # 71:	1310' FSL & 2000' FWL, Sec 36-T18N-R9W
Hospah Sand Unit #100:	1190' FEL & 2505' FNL, Sec 36-T18N-R9W
Hospah Sand Unit #101:	600' FEL & 2050' FSL, Sec 36-T18N-R9W
Hospah Sand Unit #104:	204' FEL & 1280' FNL, Sec 1-T17N-R9W

The following data is submitted in support of this application as specified by Order #R-2807-B:

1. A plat showing the location of proposed injection wells, and all wells within the project area. Offset operators and land owners will be notified.

2. Schematic drawings of the proposed injection wells which describe the casing, tubing, and perforated interval and depth showing that the injection water will be confined to the Upper Hospah Sand.

3. A tabular summary of all wells which have been drilled since the submission of the data relating to Order #R-2807-C.

August 28, 1985

4. Form C-108, Application for Authorization to Inject along with "Proof of Notice".

Tesoro Petroleum Corporation requests your early consideration and approval on this application.

Sincerely,

Gavino Perez, Jr.
Area Production Manager

GP/pd

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [ ] yes [ ] no

II. Operator: Tesoro Petroleum Corporation

Address: 8700 Tesoro Drive San Antonio, Texas 78286

Contact party: Gavino Perez Phone: 512/828-8484

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? [X] yes [ ] no
If yes, give the Division order number authorizing the project R-2807 A,B.

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: Gavino Perez, Jr. Title Area Production Manager

Signature: Gavino Perez, Jr. Date: 8/23/85

* 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. R-2797, R-2797A: Definition of Hospah Upper Sand Oil Pool. R-2807, R-2807A, R-2807B: Approval to operate waterflood. R-2807C: Approval for tertiary recovery project. Tabulation is attached for new wells.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

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.

FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT

VII. This information applies to all wells in the application.

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

   Average daily rate: 975 BWIPD
   Maximum daily rate = 1200 BWIPD

2. System is to be closed.

3. Average Inj. pressure = 300 psi.

   Msximum Inj. pressure = 320 psi.

4. Injection fluid will be produced water.

5. This well is not for disposal purposes.

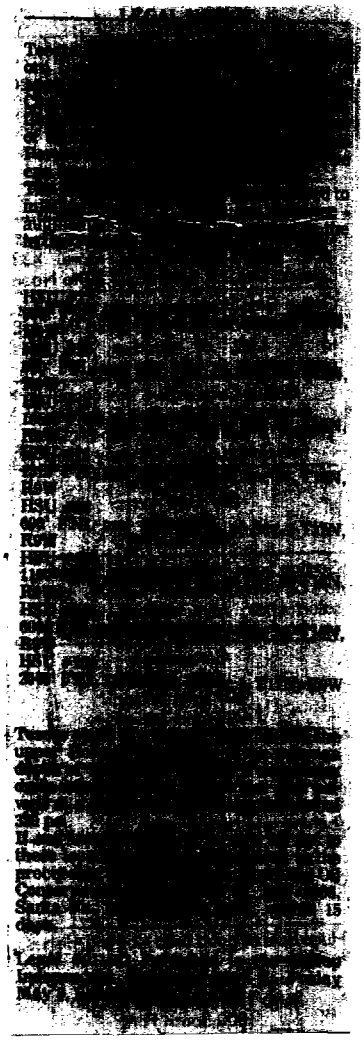
IX. No stimulation work is anticipated.

XII. Not applicable.

Affidavit of Publication

STATE OF NEW MEXICO,
) ss
COUNTY OF McKINLEY

Cecilia Paiz being duly sworn upon oath, deposes and says:



As Legal Clerk of the Gallup Independent, a newspaper published in and having a general circulation in McKinley County, New Mexico, and in the City of Gallup, therein: that this affiant makes this affidavit based upon personal knowledge of the facts herein sworn to. That the publication, a copy of which is hereto attached was published in said newspaper during the period and time of publication and said notice was published in the newspaper proper, and not in a supplement thereof,

for three times, the first publication being on the 2 day of May, 19 85 the second publication being on the 3 day of May, 19 85 the third publication on the 4 day of May, 19 85

and the last publication being on the _____ day of _____, 19____.

That such newspaper, in which such notice or advertisement was published, is now and has been at all times material hereto, duly qualified for such purpose, and to publish legal notices and advertisements within the meaning of Chapter 12, of the statutes of the State of New Mexico, 1941 compilation.

Cecilia Paiz
Affiant.

Sworn and subscribed to before me this 4 day of May, A.D., 19 85.

Margaret M Palochak
Notary Public.

My commission expires

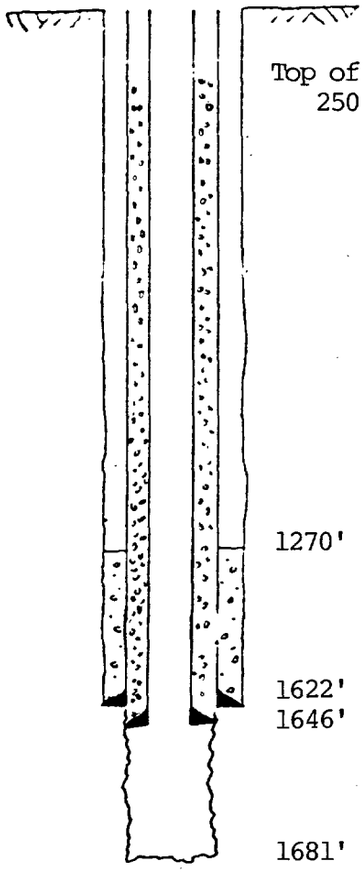
8-27-85

BUTLER'S

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
17	1650' FNL & 330' FEL	Sec. 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size 5 3/8" Cemented with 75 sx.

TOC 1270 feet determined by Volume

Hole size 7"

Intermediate Casing

Size None" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 2 7/8" Cemented with 115 sx.

TOC 250 feet determined by Volume

Hole size 5 3/8"

Total depth 1646'

Injection interval

1646 feet to 1681 feet

(perforated or open-hole, indicate which)

Tubing size 2 7/8 lined with None (material) set in a

(not completed as injection yet) (brand and model) packer at _____ feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Oil Producer

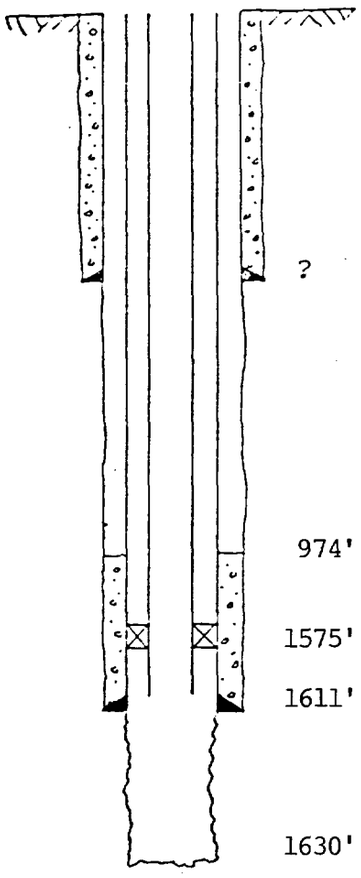
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
27	990' FSL & 1650' FEL	Sec. 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size Unknown " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Intermediate Casing

Size _____ " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 7" " Cemented with 50 sx.

TOC 975 feet determined by Volume

Hole size 8 3/4"

Total depth 1611'

Injection interval

1611 feet to 1630 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with None (material) set in a

Baker AD-1 (not completed for injection as of this date) packer at 1575 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Oil Producer

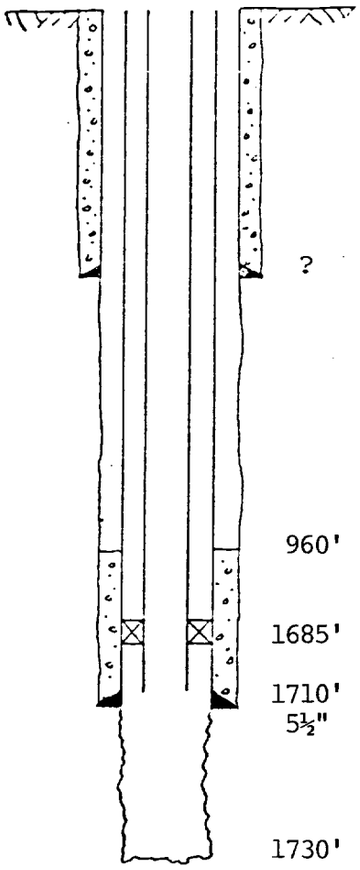
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
37	990' FSL & 990' FEL	Sec. 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size Unknown " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Intermediate Casing

Size None " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5½ " Cemented with 150 sx.

TOC 960 feet determined by Volume

Hole size 7 7/8"

Total depth 1710

Injection interval

1710 feet to 1730 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with None (material) set in a Baker AD-1 (not completed as injection as of this date) (brand and model) packer at 1685 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? ☐ Yes ☒ No

   If no, for what purpose was the well originally drilled? Oil Producer

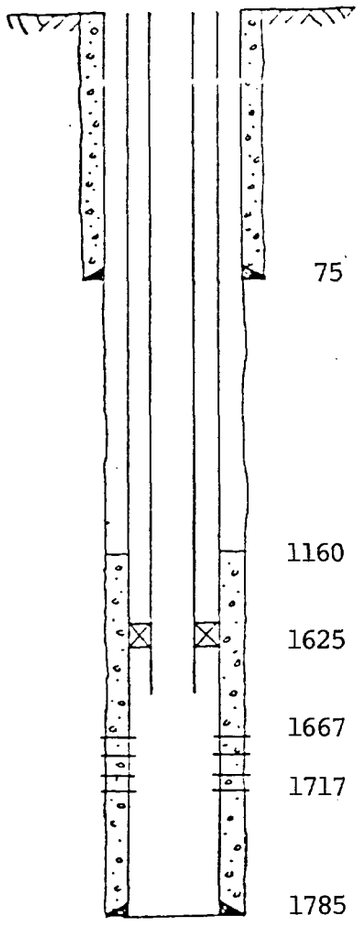
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
71	1310' FSL & 2000' FWL	Sec. 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size 7 " Cemented with 35 sx.

TOC Surface feet determined by Circulation

Hole size 9 3/4"

Intermediate Casing

Size None " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 4 1/2 " Cemented with 50 sx.

TOC 1160 feet determined by Volume

Hole size 6 1/4"

Total depth 1785'

Injection interval

1667 feet to 1717 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with None (material) set in a

Baker AD-1 Packer (not completed for inj as of this date) (brand and model) packer at 1625 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? /_/ Yes /X/ No

   If no, for what purpose was the well originally drilled? Oil Producer

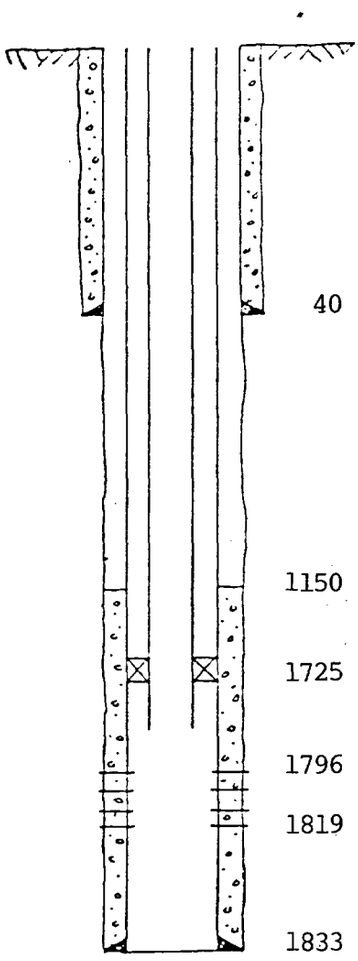
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
100	1190' FEL & 2505 FNL	Sec 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size 8 5/8" Cemented with 30 sx.

TOC Surface feet determined by Circulated

Hole size 12 1/4"

Intermediate Casing

Size None" Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5 1/2" Cemented with 100 sx.

TOC 1150 feet determined by CBL

Hole size 7 7/8"

Total depth 1833

Injection interval

1796 feet to 1819 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with NOne (material) set in a

Baker AD-1 (not completed as inj. well as of this date) packer at 1725 feet

(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? Oil Producer

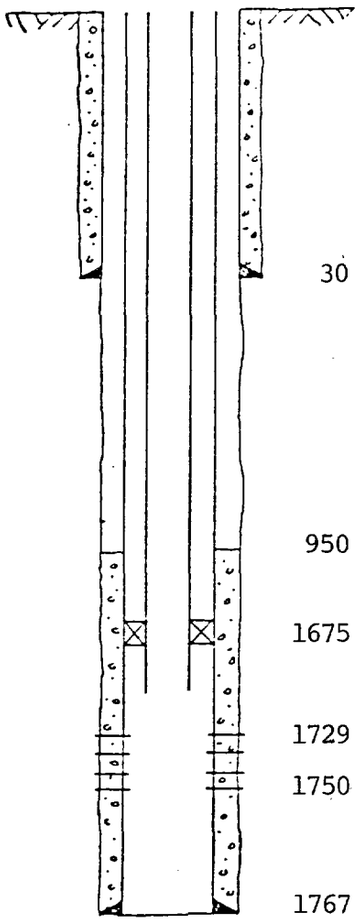
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
101	600' FEL & 2050 FSL	Sec 36 - T18N - R9W		

Schematic



Tabular Data

Surface Casing

Size 8 5/8 " Cemented with 30 sx.

TOC Surface feet determined by Circulation

Hole size 12 1/4"

Intermediate Casing

Size None " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5 1/2 " Cemented with 100 sx.

TOC 450 feet determined by CBL

Hole size 7 7/8

Total depth 1767'

Injection interval

1729 feet to 1750 feet
(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with None (material) set in a

Baker AD-1 (brand and model) (Not completed as inj. well as of this date) packer at 1675 feet.

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? [ ] Yes [X] No

   If no, for what purpose was the well originally drilled? Oil Producer

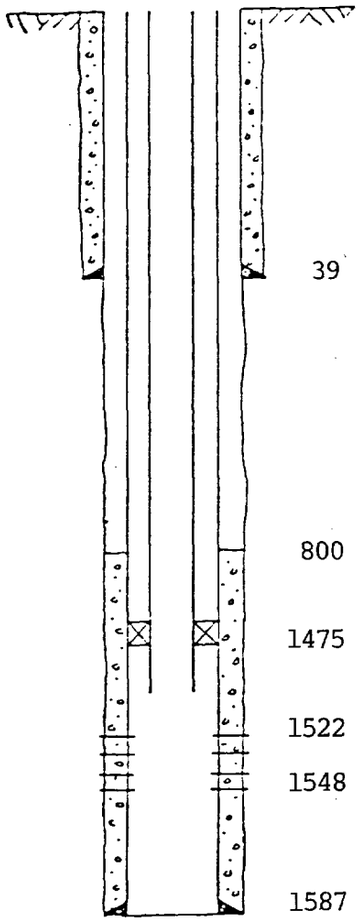
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No

INJECTION WELL DATA SHEET

OPERATOR	LEASE			
Tesoro Petroleum Corporation	Hospah Sand Unit			
WELL NO.	**FOOTAGE LOCATION**	**SECTION**	**TOWNSHIP**	**RANGE**
104	204' FEL & 1280' FNL	Sec 1 - T17N - R9W		

Schematic



Tabular Data

Surface Casing

Size 8 5/8 " Cemented with 30 sx.

TOC Surface feet determined by Circulation

Hole size 12 1/4

Intermediate Casing

Size None " Cemented with _____ sx.

TOC _____ feet determined by _____

Hole size _____

Long string

Size 5 1/2 " Cemented with 100 sx.

TOC 800 feet determined by _____

Hole size 7 7/8"

Total depth 1587

Injection interval

1522 feet to 1548 feet

(perforated or open-hole, indicate which)

Tubing size 2 3/8 lined with None (material) set in a

Baker AD-1 (Not completed as inj. well as of this date) (brand and model) packer at 1475 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Upper Hospah

2. Name of Field or Pool (if applicable) Hospah Upper Sand Oil Pool

3. Is this a new well drilled for injection? / / Yes /X/ No

   If no, for what purpose was the well originally drilled? Oil Producer

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. No

TABULATION OF WELLS IN AREA OF REVIEW
POLYMER AUGMENTED WATERFLOOD
HOSPAH FIELD
McKINLEY COUNTY, NEW MEXICO

OPERATOR LEASE NAME, WELL	LOCATION	UNIT STATUS	DATE DRILLED M/Y	TOTAL DEPTH FT	HOLE SIZE, IN.	CASING DATA SIZE, IN.	CASING DATA DEPTH, FT	CEMENT DATA SACKS USED	CEMENT DATA TOP, FT	HOW DETERMINED	PRODUCING INTERVAL FT	PRODUCING FORMATION	TUBING DATA SIZE, IN	TUBING DATA DEPTH, FT	TYPE OF PACKER
TESORO PETROLEUM CORP.															
HOSPAH SAND UNIT NO. 100	1,980' FEL & 2,665' FNL SEC 36, T18N, R9W	S.I.	1/83	1,835 PB 1,825	12-1/4 7-7/8	8-5/8 5-1/2	40 1833	30 100	0 1150	CIRC CBL	1796-1819	U. HOSPAH	NONE		
HOSPAH SAND UNIT NO. 101	660' FEL & 2040' FNL SEC 36, T18N, R9W	S.I.	12/82	1768 PB 1758	12-1/4 7-7/8	8 5/8 5-1/2	41 1767	30 100	0 950	CIRC CBL	1729-1750	U. HOSPAH	NONE		
HOSPAH SAND UNIT NO 102	2040' FEL & 1280' FNL SEC 1, T17N, R9W	PROD.	12/82	1695 PB 1683	12-1/4 7-7/8	8-5/8 5-1/2	39 1694	90 100	0 950	CIRC CBL	1633-1665	U. HOSPAH	2-3/4	1649	BOPI
HOSPAH SAND UNIT NO. 104	2040' FEL & 1280' FNL SEC 1, T17N, R9W	PROD.	12/82	1588 PB 1574	12-1/4 7-7/8	8 5/8 5-1/2	39 1587	30 100	0 800	CIRC CBL	1522-1548	U. HOSPAH	2 3/8	1549	BOPI

August 28, 1985

CERTIFIED MAIL

Mr. Alex McLean
Tenneco Oil
P.O. Box 3249
Englewood, Colorado 80155

Re: Application for Approval
of Addition Injection Wells
at the Hospah Sand Unit

Dear Mr. McLean,

Per New Mexico Oil Conservation Division Rule #701, we are furnishing a copy of our application for additional injection wells at the Hospah Sand Unit.

If you have any questions, please call me at the number below.

Sincerely yours,

Gavino Perez
Area Production Manager

GP/pd

TESORO

August 28, 1985

CERTIFIED MAIL

Mr. Norman Witte
Celsius Energy Company
79 South State Street
Salt Lake City, Utah 84147

Re: Application for Approval
of Addition Injection Wells
at the Hospah Sand Unit

Dear Mr. Witte,

Per New Mexico Oil Conservation Division Rule #701, we are furnishing a copy of our application for additional injection wells at the Hospah Sand Unit.

If you have any questions, please call me at the number below.

Sincerely yours,

Gavino Perez, Jr.
Area Production Manager

GP/pd

TESORO

August 28, 1985

CERTIFIED MAIL

Mr. Roy Graham
State Land Office
P.O. Box 1148
Santa Fe, New Mexico 87501

Re: Application for Approval
of Addition Injection Wells
at the Hospah Sand Unit

Dear Mr. Graham,

Per New Mexico Oil Conservation Division Rule #701, we are furnishing a copy of our application for additional injection wells at the Hospah Sand Unit.

If you have any questions, please call me at the number below.

Sincerely yours,

Gavino Perez, Jr.
Area Production Manager

GP/pd

TESORO

August 28, 1985

CERTIFIED MAIL

Mr. Vernon D. Dyer
District Landman
Santa Fe Energy Company
One Security Park
7200 I-40 West
Amarillo, Texas 79106

Re: Application for Approval
of Addition Injection Wells
at the Hospah Sand Unit

Dear Mr. Dyer,

Per New Mexico Oil Conservation Division Rule #701, we are furnishing a copy of our application for additional injection wells at the Hospah Sand Unit.

If you have any questions, please call me at the number below.

Sincerely yours,

Gavino Perez, Jr.
Area Production Manager

GP/pd

LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE