STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. Box 2088
Santa Fe, New Mexico 87501

Side 1

Case 8283

APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELL

Operator Tenneco Oil Company Contact Party Scott McKinney

Address P.O. Box 3249, Englewood, CO 80155 Phone No. 303/740-2594

Lease Jones Well No. 5 UT A Sec. 35 TWP 29N RGE R8W

Pool Name Basin Dakota Minimum Rate Requested _____

Transporter Name El Paso Natural Gas Purchaser (if different) _____

Are you seeking emergency "hardship" classification for this well? X yes _____ no

Applicant must provide the following information to support his contention that the subject well qualifies as a hardship gas well.

Provide a statement of the problem that leads the applicant to believe that "underground waste" will occur if the subject well is shut-in or is curtailed below its ability to produce. (The definition of underground waste is shown on the reverse side of this form)

2) Document that you as applicant have done all you reasonably and economically can do to eliminate or prevent the problem(s) leading to this application.

   a) Well history. Explain fully all attempts made to rectify the problem. If no attempts have been made, explain reasons for failure to do so.

   b) Mechanical condition of the well(provide wellbore sketch). Explain fully mechanical attempts to rectify the problem, including but not limited to:

      i) the use of "smallbore" tubing; ii) other de-watering devices, such as plunger lift, rod pumping units, etc.

Present historical data which demonstrates conditions that can lead to waste. Such data should include: —

   a) Permanent loss of productivity after shut-in periods (i.e., formation damage).

   b) Frequency of swabbing required after the well is shut-in or curtailed.

   c) Length of time swabbing is required to return well to production after being shut-in.

   d) Actual cost figures showing inability to continue operations without special relief

4) If failure to obtain a hardship gas well classification would result in premature abandonment, calculate the quantity of gas reserves which would be lost

5) Show the minimum sustainable producing rate of the subject well. This rate can be determined by:

   a) Minimum flow or "log off" test; and/or

   b) Documentation of well production history (producing rates and pressures, as well as gas/water ratio, both before and after shut-in periods due to the well dying, and other appropriate production data).

6) Attach a plat and/or map showing the proration unit dedicated to the well and the ownership of all offsetting acreage.

7) Submit any other appropriate data which will support the need for a hardship classification.

8) If the well is in a prorated pool, please show its current under- or over-produced status.

9) Attach a signed statement certifying that all information submitted with this application is true and correct to the best of your knowledge; that one copy of the application has been submitted to the appropriate Division district office (give the name) and that notice of the application has been given to the transporter/purchaser and all offset operators.

EXHIBIT "B" CASE NO. 8077 ORDER NO. R-7453

GENERAL INFORMATION APPLICABLE TO HARDSHIP GAS WELL CLASSIFICATION

1) **Definition of Underground Waste.**

> "Underground Waste as those words are generally understood in the oil and gas business, and in any event to embrace the inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing, of any well or wells in a manner to reduce or tend to reduce the total quantity of crude petroleum oil or natural gas ultimately recovered from any pool, and the use of inefficient underground storage of natural gas."

2) The only acceptable basis for obtaining a "hardship" classification is prevention of waste with the burden of proof solely on the applicant. The applicant must not only prove waste will occur without the "hardship" classification, but also that he has acted in a responsible and prudent manner to minimize or eliminate the problem prior to requesting this special consideration. If the subject well is classified as a "hardship" well, it will be permitted to produce at a specified minimum sustainable rate without being subject to shut-in by the purchaser due to low demand. The Division can rescind approval at any time without notice and require the operator to show cause why the classification should not be permanently rescinded if abuse of this special classification becomes apparent.

3) The minimum rate will be the minimum sustainable rate at which the well will flow. If data from historical production is insufficient to support this rate (in the opinion of the Director), or if an offset operator or purchaser objects to the requested rate, a minimum flow ("log off") test may be required. The operator may, if he desires, conduct the minimum flow test, and submit this information with his application.

4) If a minimum flow test is to be run, either at the operator's option or at the request of the Division, the offset operators, any protesting party, the purchaser and OCD will be notified of the date of the test and given the opportunity to witness, if they so desire.

5) Any interested party may review the data submitted at either the Santa Fe office or the appropriate OCD District Office.

6) The Director can approve uncontested applications administratively if, in his opinion, sufficient justification is furnished. Notice shall be given of intent to approve by attaching such notice to the regular examiner's hearing docket. Within 20 days following the date of such hearing, the affected parties will be permitted to file an objection. If no objection has been filed, the application may be approved.

7) Should a protest be filed in writing, the applicant will be permitted to either withdraw the application, or request it to be set for hearing.

8) An emergency approval, on a temporary basis for a period not to exceed 90 days, may be granted by the District Supervisor, pending filing of formal application and final action of the OCD Director. This temporary approval may be granted only if the District Supervisor is convinced waste will occur without immediate relief. If granted, the District Supervisor will notify the purchaser.

9) After a well receives a "hardship" classification, it will be retained for a period of one year unless rescinded sooner by the Division. The applicant will be required to certify annually that conditions have not changed substantially in order to continue to retain this classification.

10) Nothing here withstanding, the Division may, on its own motion, require any and all operators to show cause why approval(s) should not be rescinded if abuse is suspected or market conditions substantially change in the State of New Mexico.

11) A well classified as a "hardship well" will continue to accumulate over and under production (prorated pools). Should allowables exceed the hardship allowable assigned, the well will be permitted to produce at the higher rate, if capable of doing so, and would be treated as any other non-hardship well. Any cumulative overproduction accrued either before or after being classified "hardship" must, however, be balanced before the well can be allowed to produce at the higher rate.

Tenneco Oil
Exploration and Production
A Tenneco Company

6162 South Willow Drive
P.O. Box 3249
Englewood, Colorado 80155
(303) 740-4800

Western Rocky Mountain Division

Florene
Set for hearing
JKOR

June 20, 1984

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

Case 8283

RE: Hardship Status - Jones #5
Section 35, T29N, R8W
San Juan County, New Mexico

Gentlemen:

Tenneco Oil requests that the referenced well be classified as a hardship gas well. Underground waste will occur due to shut-in because of a build up of liquids in the wellbore requiring the well to be swabbed to return it to production. The build up of liquids in the wellbore also causes the water saturation of the pay zones near the wellbore to increase, there by lowering the relative permeability to gas. This low relative permeability, whether permanent or temporary, will restrict the flow of gas.

This well currently has no dewatering devices installed since the well will not log off as long as it is producing. However, when the well is shut in for a period of time it has to be swabbed to return it to production. The use of other dewatering devices has been considered but rejected. These are:

(1) Plunger lift - due to shut-in bottom hole pressure being very close to the line pressure.

(2) Undersize tubing - the minimum flow rates necessary to unload the produced water, as calculated by the methods proposed by Turner are listed below:

2-3/8" (1.995" ID) - 697 MCFD
1-1/4" (1.380" ID) - 333 MCFD
1" (1.049" ID) - 193 MCFD

Since the well has a deliverability of approximately 155 MCFD none of the above tubing sizes would enable the well to unload its produced water. It would not be advisable to use smaller tubing than 1" at these depths.

Normal swab time is usually one to two days, at a cost of approximately $1,500.00. If Tenneco abandoned this well due to failure to obtain hardship gas well classification, the quantity of gas reserves which would be lost would be 325 MMCF. This well is in a prorated pool which is currently not classified due to being a marginal well.

If you have any questions concerning the application for hardship gas well status, please contact Mark Owen, Production Engineer at 303/740-4840.

Very truly yours,

Scott McKinney
Senior Regulatory Analyst

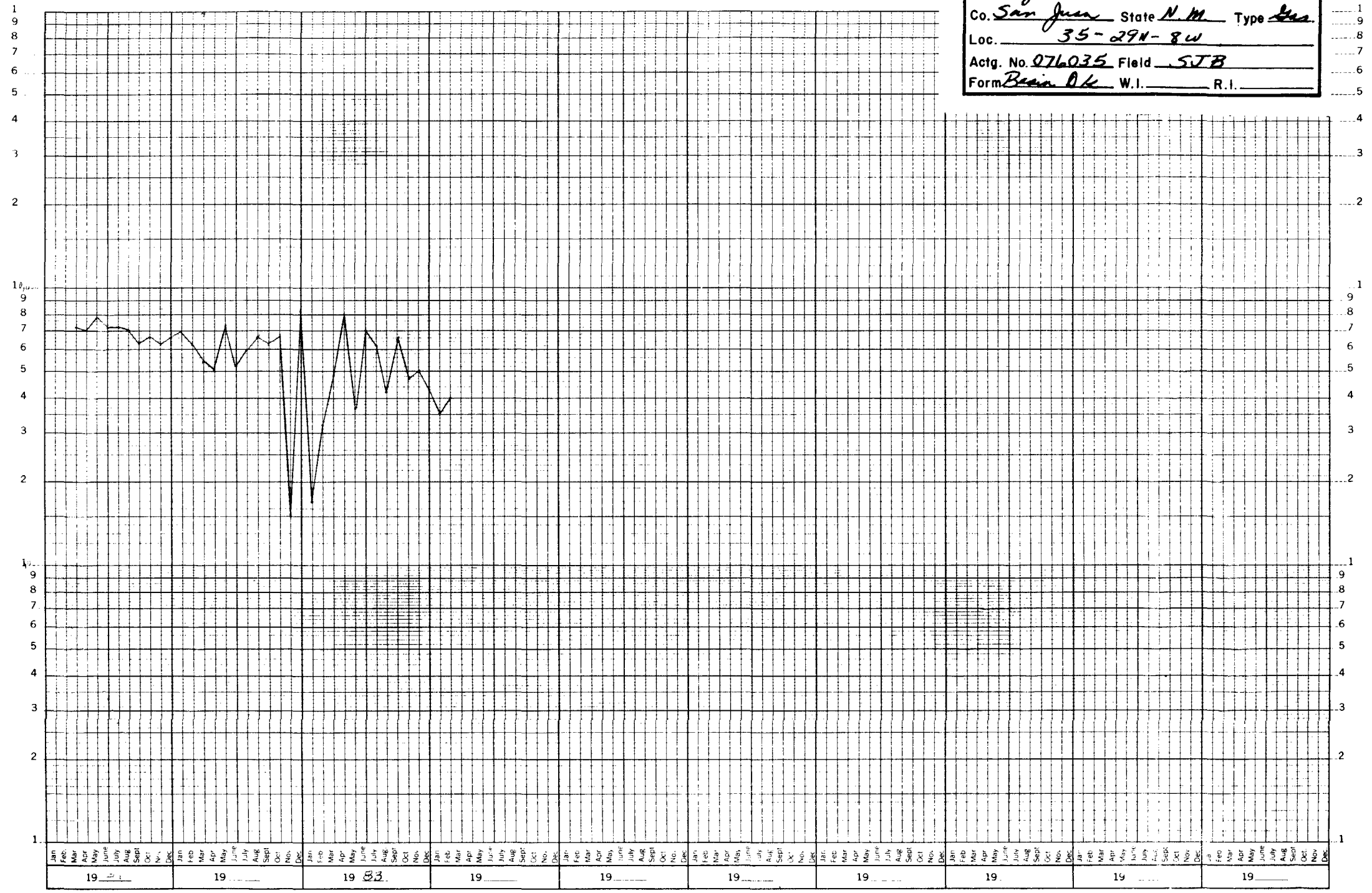
SMc:gj
Attachment

cc: Mark Owen
Joe Vice
El Paso Natural Gas

TENNECO OIL COMPANY Company Operated
Lse. Jones Well No. #5
Co. San Juan State N.M. Type Gas
Loc. 35-29N-8W
Actg. No. 076035 Field SJB
Form Basin DK W.I. _____ R.I. _____

47 6740

K•E 10 YEARS BY MONTHS x 3 LOG CYCLES
KEUFFEL & ESSER CO MADE IN U.S.A.



2878

LEASE Jones

WELL NO. 5

9-5/8 "OD, 36 LB, K-55 CSG.W/210 SX

TOC @ Surface

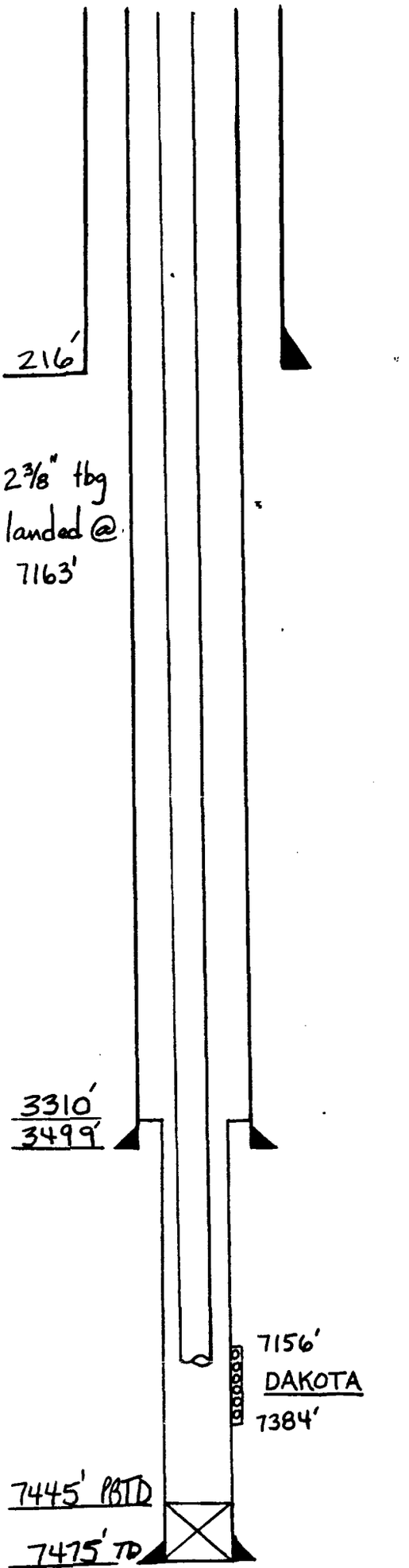
7 "OD, 23 LB, K-55 CSG.W/765 SX

lost returns w/40 bbls disp. remaining

Est. TOC @ 1600'

4-1/2 "OD.10.5,11.6 LB, K-55 CSG.W/450 SX

TOC @ liner top (3310)



- TENNECO WELL HISTORY -

2885/2

Well Name Jones 5 Unit A Sec 35 T 29N R 8W
TD 7475 PBTD 7445 County San Juan State NM WI .5000 RI .4225
Drlg Cost $186,000 Comp Cost $104,000 Comp Date 10-8-80 Trn On Date 3-9-81
DK-AOF IP ____ BOPD 2042 MCFD ____ BWPD 3 Hours 2250 SIWHP
____ IP ____ BOPD ____ MCFD ____ BWPD ____ Hours ____ SIWHP

- TUBULAR RECORD -

Size	Weight	Grade	Depth	Cement	Top Cement	Hole Size	Remarks
9-5/8	36	K-55	216	210	Surface	12-1/4	
7	23	K-55	3499	765	Est. @ 1600'	8-3/4	
4-1/2	10.5, 11.6	K-55	7475	450	TOL	6-1/4	TOL @ 3310'
2-3/8	4.7	J-55	7163				

Packer? Yes ___ No X Type ____ Depth ____
Anchor? Yes ___ No X Type ____ Depth ____
Pump Type ____

- COMPLETION & WORKOVER RECORD -

Zone #1 - Formation Dakota Date 9-20-80 Perfs w/JSPF 2 JSPF: 7156-80, 7286-94, 7320-22, 7334-52, 7360-62, 7372-74, 7382-84 (Total 58', 116 shots)

Press Tstd 3500 PSI, Spot Acid - Type 7-1/2% HCl Gallons 500 BDISIP 1750
Acid: Vol. & Type 2120g 15% HCl ,# balls 174, Rate 33 BPM, Press. 3000 PSI
Frac: Fluid Volume & Type 80,000 g 30# XL , Sand: 105,000# 20/40&10/20 Mesh
Frac Rate 64 BPM Frac Pressure 2800 PSI ISIP 2450 PSI
Comments Dropped 58 balls between stages. 2nd stage pumpd @ 32 BPM & 3400 psi.

Zone # 2 - Formation ____ Date ____ Perfs w/JSPF ____

Press Tstd ____ PSI, Spot Acid - Type ____ Gallons ____ BDISIP ____
Acid: Vol. & Type ____,# balls ___, Rate ___ BPM, Press. ___ PSI
Frac: Fluid Volume & Type ____, Sand: ____ # ____ Mesh
Frac Rate ____ BPM Frac Pressure ____ PSI ISIP ____ PSI
Comments ____

Zone # 3 - Formation ____ Date ____ Perfs w/JSPF ____

Press Tstd ____ PSI, Spot Acid - Type ____ Gallons ____ BDISIP ____
Acid: Vol. & Type ____,# balls ___, Rate ___ BPM, Press. ___ PSI
Frac: Fluid Volume & Type ____, Sand: ____ # ____ Mesh
Frac Rate ____ BPM Frac Pressure ____ PSI ISIP ____ PSI
Comments ____

- CASING REPAIR RECORD -

Depth of Leak ____, # of squeezes required ___, # of sx used ____
Cathodic Protection? Yes ___ No ___ Date Installed ____

Comments Loc: 1030' FNL, 1180' FEL

Prepared By: Mark T. Owen Date: 6-5-84 Verified By: Date:

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
TENNECO OIL COMPANY	JONES	5

Unit Letter	Section	Township	Range	County
A	35	29N	8W	San Juan

Actual Footage Location of Well:
1030 feet from the North line and 1180 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6343	Dakota	Basin Dakota	320.0 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

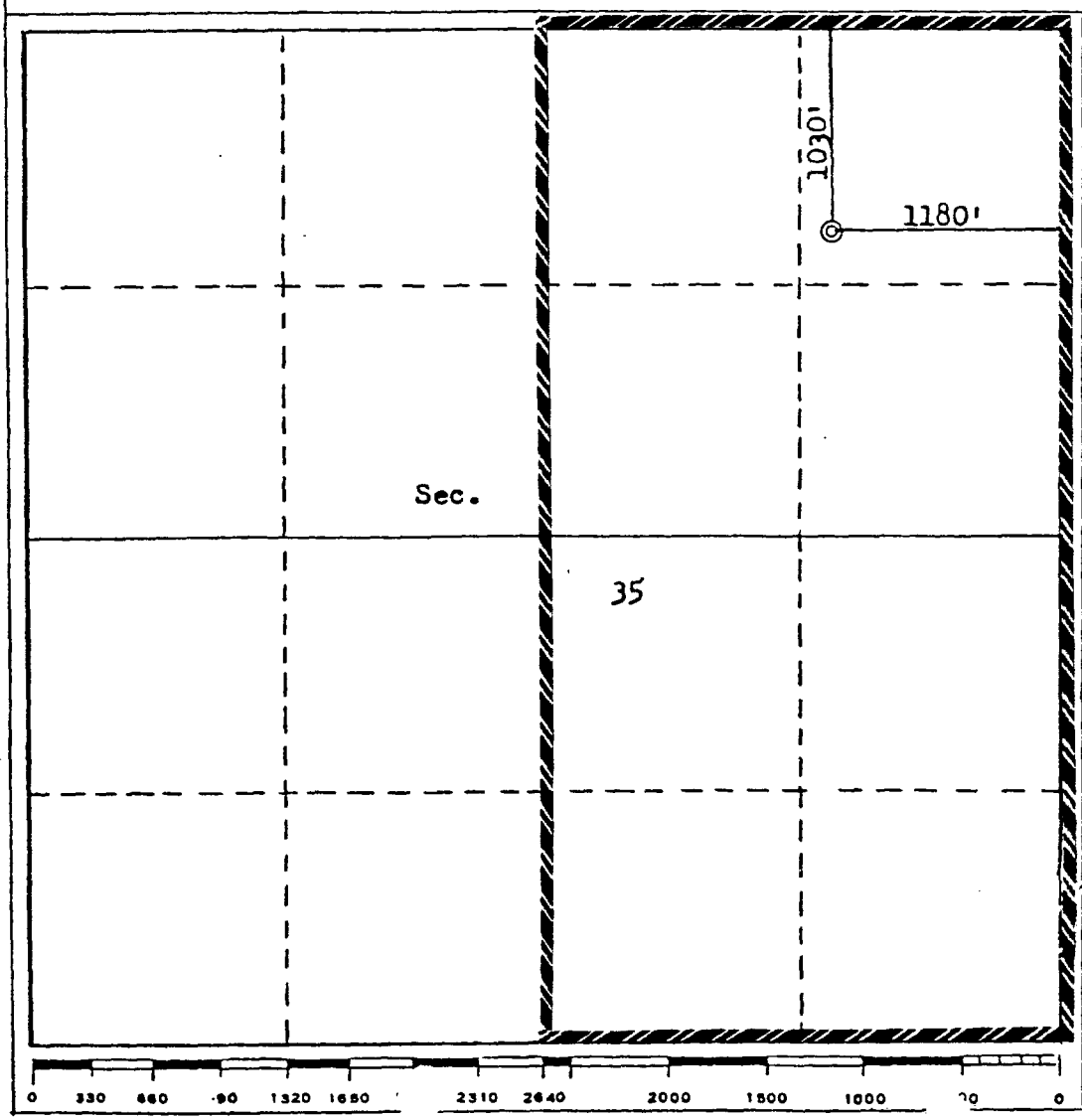
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been 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 unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name: Martin Dee Leeman

Position: Staff Production Analyst

Company: Tenneco Oil Company

Date: December 4, 1979

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 Surveyed: November 27, 1979 (Restake)

Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED LAND SURVEYOR FRED B. KERR JR.

OFFSET OPERATORS

Jones #5
Sec. 35, T29N, R8W
San Juan County, NM

Jerome P. McHugh & Ass.
650 S. Cherry St., Suite 1225
Denver, Co 80222

Mesa Petroleum Co.
1660 Lincoln St., Suite 2800
Denver, Co. 80264