



March 16, 1973

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

ATTN: Mr. Dan Nutter

1142-46
Blue Paper 8

RE: Case 4793-Order No. R-4389
Expansion of Project Area
Hospah, South-Lower Sand
(Tenneco Lower Hospah
Pressure Maintenance) Pool

Gentlemen:

Tenneco Oil Company respectfully requests administrative approval to expand the Lower Hospah Pressure Maintenance Project, in accordance with Rule 10 of Order No. R-4389.

The expansion is to include the injection of produced water into Tenneco's Whigham No. 2 well, located 990' FSL & 990' FEL, Section 11, T17N & R9W, McKinley County, New Mexico.

The following are submitted in support of this application:

- 1) A plat showing the location of the proposed injection well, all wells within the project area, and the location of the only additional offset operator, Tesoro Petroleum Corporation.
- 2) A schematic diagram of the proposed injection well.
- 3) A log section of the proposed injection zone (Lower Hospah @ 1872'-1966').
- 4) A prognosis of the conversion procedure.

Tesoro will be notified by receiving a copy of this application, along with the supporting data.

*... convert this
... Lower Hospah - Lower Hospah injection
... by Jim Caruso to D.D. by
phone on 3/15/73.*

TENNECO OIL COMPANY

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Tenneco requests your early consideration and approval of this application.

Yours very truly,

TENNECO OIL COMPANY

A handwritten signature in cursive script, appearing to read "R.A. Williford", with a small "SDC" written to the right of the signature.

R. A. Williford
District Production Manager

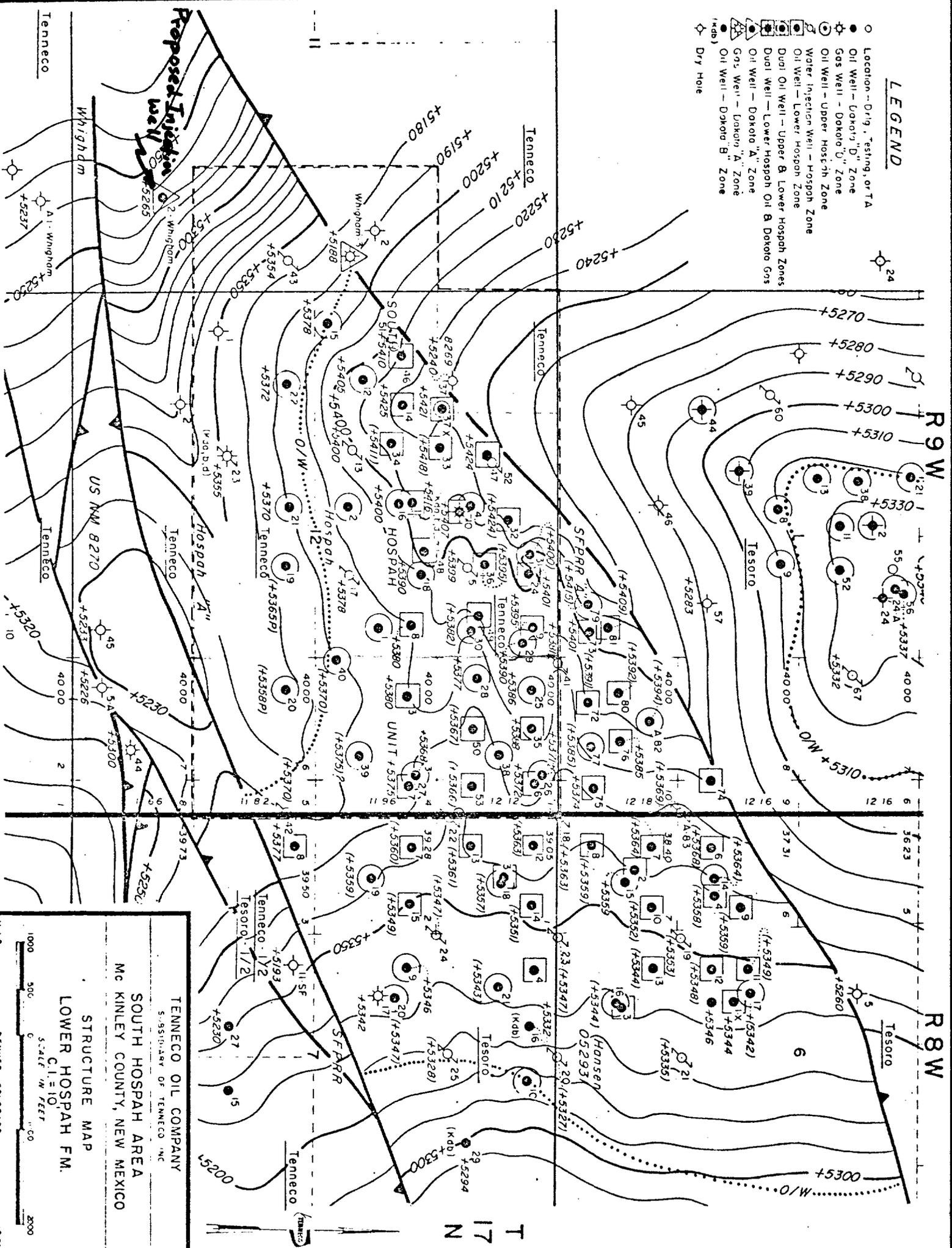
MJD/lj

Attachments

cc: Mr. Emery C. Arnold-NMOCC-Aztec, N.M.
Mr. Harvey Ashford-Tesoro-Denver, Colo.
C. W. Nance-Tenneco-Rocky Mountain Division
Mr. Harold Vaghtborg-Tesoro-San Antonio, Texas

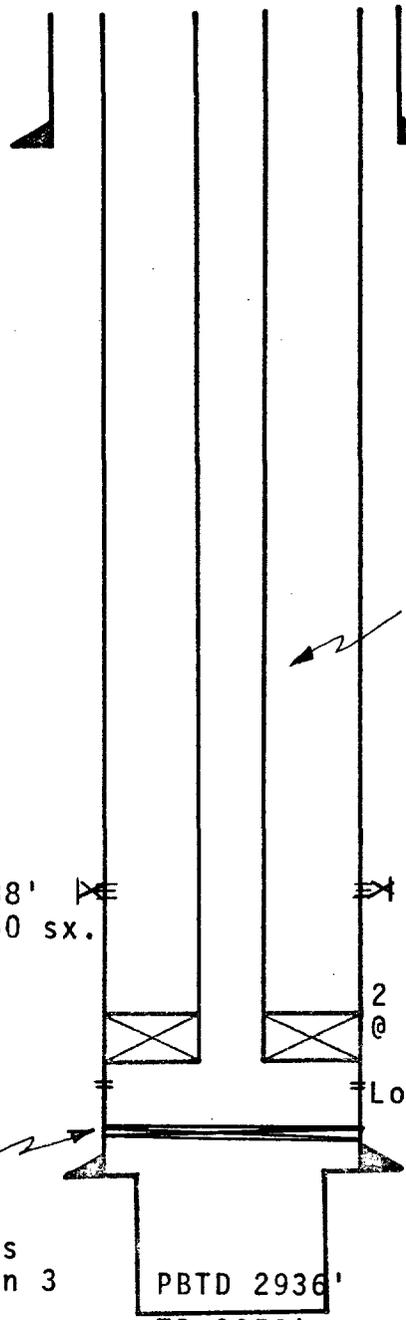
LEGEND

- Location - Dry, Testing, or TA
- Oil Well - Dakota "D" Zone
- ⊕ Gas Well - Dakota "U" Zone
- ⊙ Oil Well - Upper Hoshpah Zone
- ⊖ Water Injection Well - Hoshpah Zone
- ⊗ Oil Well - Lower Hoshpah Zone
- ⊘ Dual Oil Well - Upper & Lower Hoshpah Zones
- ⊙ Dual Well - Lower Hoshpah Oil & Dakota Gas
- ⊙ Gas Well - Dakota "A" Zone
- ⊙ Gas Well - Dakota "B" Zone
- ◇ Dry Hole



TENNECO OIL COMPANY
 SUBSIDIARY OF TENNECO INC.
SOUTH HOSPAH AREA
LOWER HOSPAH FM.
 Mc KINLEY COUNTY, NEW MEXICO
 STRUCTURE MAP
 C.I. = 10
 SCALE IN FEET
 1" = 1000'
 1" = 500'
 1" = 2000'
 DENVER, COLORADO
 1272

Elev: 7119' KB (13' AGL)



10 3/4", 32.75#, H-40 Csg. @ 97'. Cmt'd. w/125 sx. Cmt. Circ

Inhibited fluid in annulus.
Top Cmt. @ 1500'

Upper Hospah Zone: 1804'-38'  
Tested 5/67. Squeezed w/150 sx.
Class "C" cmt.

2 7/8" OD, 6.5# tbg. on tension pkr @ approx. 1850'

Lower Hospah perfs: 1872'-1966'

Set CIBP @ approx. 2700' 

4 1/2", 9.5#, J-55 csg. @ 2970' Cmt'd w/265 ft³.

Dakota Zone: 2711'-2900'
Tested 9/69. F/30,000 gals gelled wtr. +30,000 # sd in 3 stages.
IP: F/154 B0, 12 BW, 174 MCFG.
Well T.A.: 11/70
Cum. Prod: 1/1/73-6600 B0

PBTD 2936'
TD 3050'

Tenneco Oil Company
South Hospah Lower Sand Field McKinley County, New Mexico
Whigham No. 2 Proposed Injection well 990' FSL & 990' FEL, Sec. 11, T17N & R9W

TENNISCO WAGON # 2

UPPER HOSPAN ZONE

1800



LOWER HOSPAN

PROPOSED PERFS:
1872' - 1966'

1900



2000

TENNESSEE WYKASAWA #2

CIBP + 10SK. CNT.

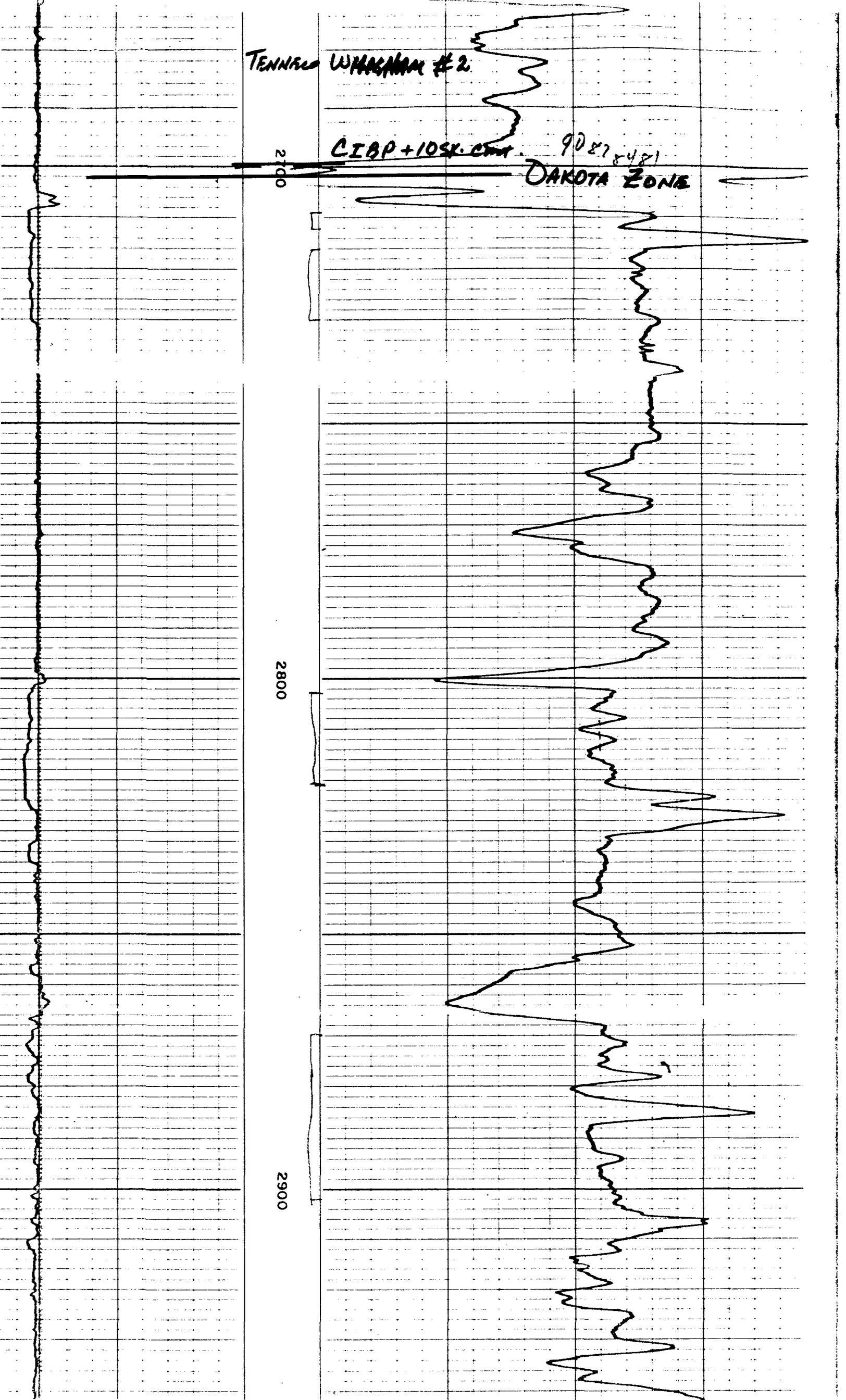
90 27 481

DAKOTA ZONE

2700

2800

2900



WIGHAM NO. 2 INJECTION WELL
CONVERSION PROCEDURE

1. Unseat pkr. & pull out of hole. Redress pkr. & rig for 2 7/8" O.D. NUE tbg.
2. Set CIBP @ 2700' & dump 10 sx. cmt on top.
3. Load hold w/ fresh water containing 2% KCL & 1 gal. "Addmall"/1000 gals.
4. Spot 15% LSTNE acid from 1966'-1850' (150 gals.) & lay down 2 3/8" tbg. - Pick up 2 7/8" NUE, 6.5#, J.55 tbg. w/turned down collars, internally plastic coated.
5. Perforate 4 1/2" csg. @ 1872'-1966' (Lower Hospah Zone) w/ 1 CJSPF (0.45" Hyper set or equiv.) Total of 94 holes.
6. Treat w/1000 gals 15% LSTNE acid.
7. GIH w/ 2 7/8" NUE tbg. & re-dressed "Lok-Set" pkr.
8. Set pkr. @ 1850' # & load backside w/inhibited water.
9. Put well on injection.