



1-1-245  
10-11-66  
TENNECO OIL COMPANY • P. O. BOX 1031 • 1800 WILCO BUILDING • MIDLAND, TEXAS 79701

November 17, 1966

New Mexico Oil Conservation Commission

A. L. Porter, Jr.,  
Secretary Director  
P. O. Box 2088  
Santa Fe, New Mexico

NOV 21 AM 10 17

Gentlemen:

Reference is made to Order R-3069 authorizing Tenneco to institute a waterflood project in the Grayburg Jackson Pool by injecting water into the San Andres formation through four wells located in Section 28, T-17-S, R-29-E, Eddy County, New Mexico. The Order further provides for expansion by Administrative approval upon unitization. The G - J West Coop. Ut. was approved by Order No. R-3127.

Tenneco Oil Company hereby requests permission to expand the project by converting unit wells #1, #5, #11, #17, and #19 to water injection.

The four wells initially placed on injection were to determine if the formation would accept water at a reasonable pressure. This has been resolved to Tenneco's satisfaction; therefore, in order to furnish back-up and to keep the injection pattern balanced, it is necessary to convert additional wells.

Fresh water, purchased from Double Eagle Corporation, will be injected into the Oolitic Zone of the San Andres formation in each of the wells. It is anticipated that 500 barrels per day will be injected into each well.

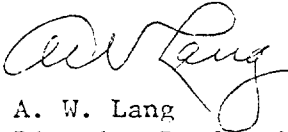
The following is attached:

1. A plat showing the outline of the G - J West Coop. Ut. with the existing injection wells shown in red and the wells proposed to be converted to injection at this time encircled in blue.
2. Log of Unit wells #11, #17, and #19. Logs of wells #1 and #5 are not available at this time.
3. Diagrammatic sketches of the proposed injection wells showing all casing strings, amount of cement used, intervals to be injected into, tubing, type and location of packer, as well as other pertinent information.

We will appreciate your approval of this application as soon as possible.

Yours very truly,

TENNECO OIL COMPANY



A. W. Lang  
District Production Superintendent

FH:pt

Attachments

cc: State Engineer Office  
Capitol Building  
Santa Fe, New Mexico

Boyd & Plemmons  
P. O. Box 692  
Artesia, New Mexico

Depco  
825 Petroleum Club Bldg.  
Denver, Colorado

Sinclair Oil & Gas Co.  
P. O. Box 1470  
Midland, Texas

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
Oil Conservation Commission



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

P. O. DRAWER DD  
ARTESIA

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

November 30, 1966

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

Attention: J. E. Kapteina

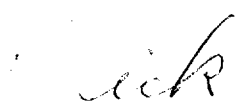
Re: Application, WFX 245

Dear Jim:

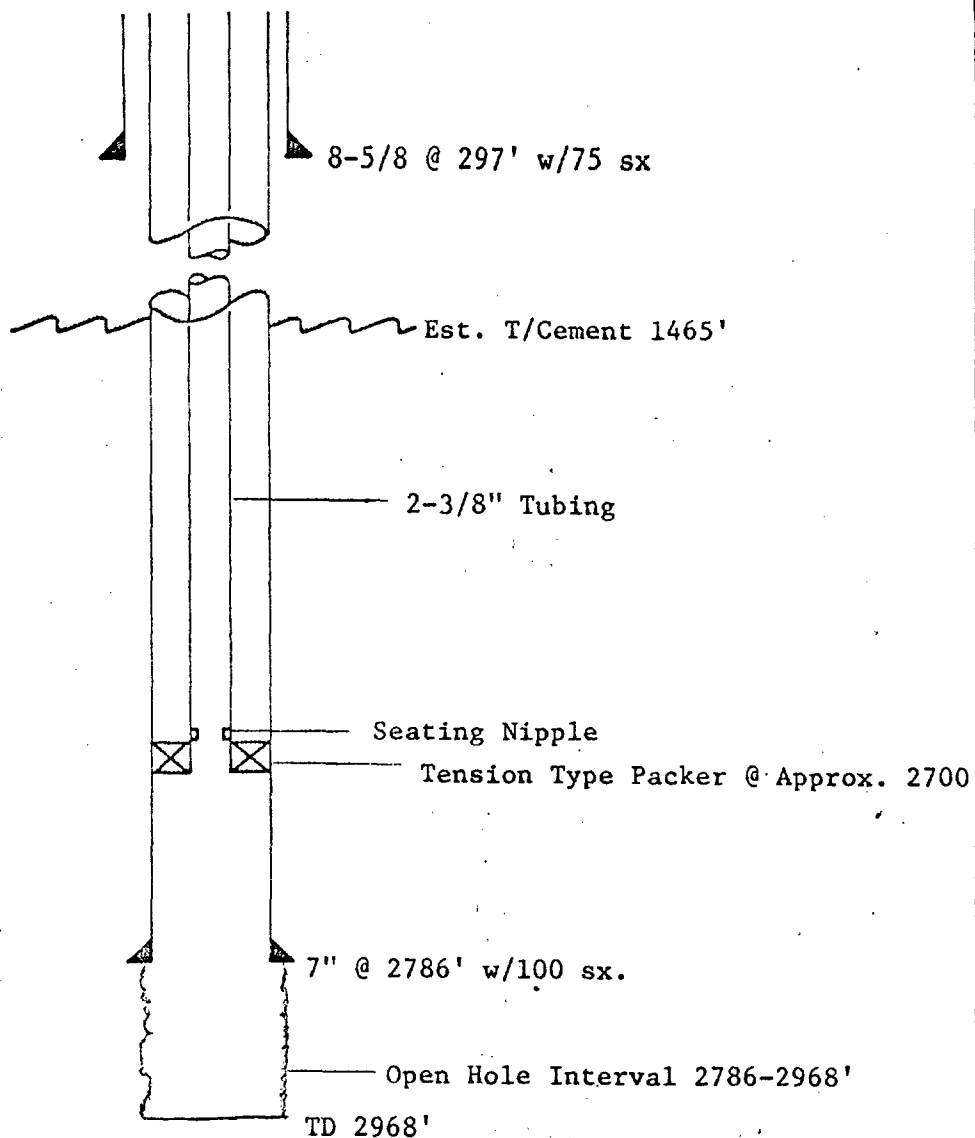
We can find no objection to the mechanics of the subject application. However, this project is offset in the W/2 NW/4 of Section 27-17-29 by the Tom Boyd & Jack Plemons Continental 27 State lease which is currently producing top allowable. Expansion of the unit flood, without relief to this offset operator, could result in oil being flushed past his wells.

Very truly yours,

OIL CONSERVATION COMMISSION

  
R. L. Stamets  
Geologist

RLS/bh



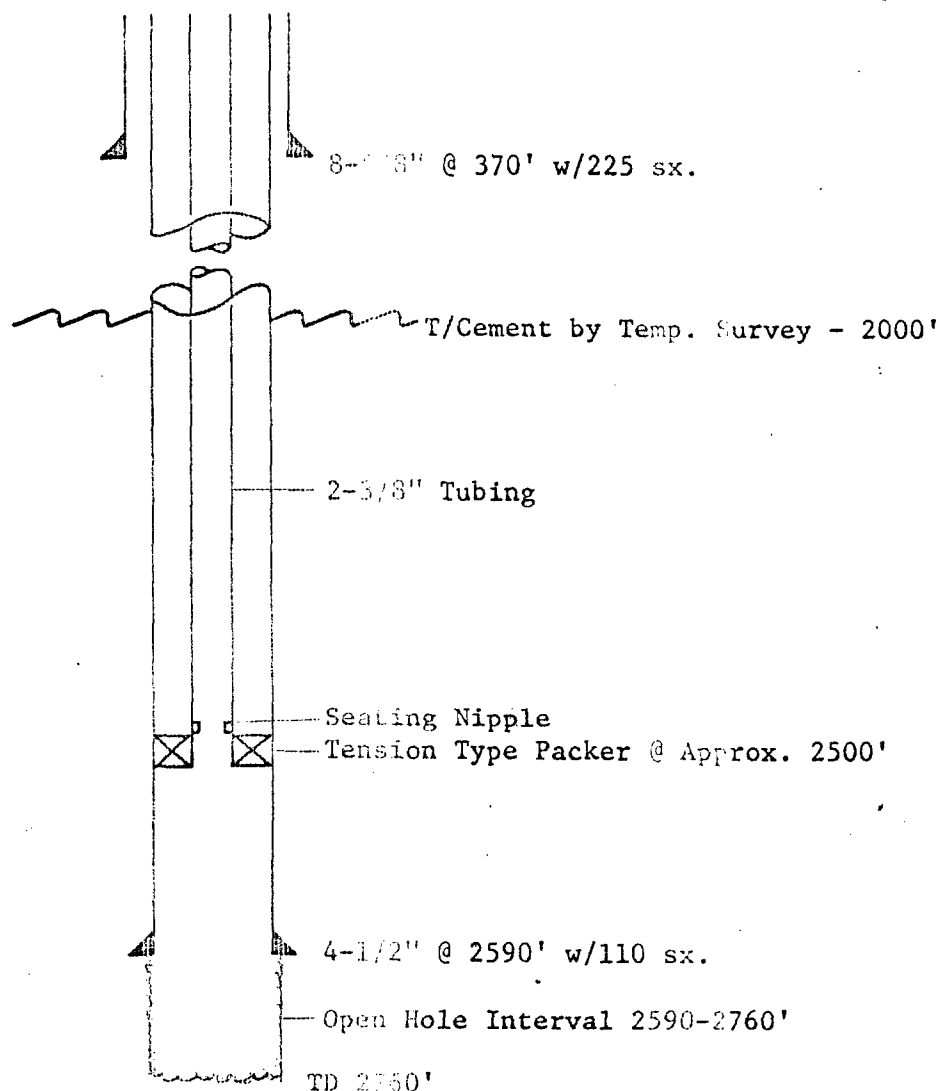
Water will be injected into Oolitic Zone or San Andres in Open Hole 2786-2968'. Below a tension type packer. The tubing-casing annulus will be loaded with corrosion-inhibited fluid.



TENNECO OIL COMPANY  
SUBSIDIARY OF TENNECO CORPORATION

PROPOSED WATER INJECTION WELL

G - J West Coop. Ut, Well No. 5  
Grayburg Jackson Field  
990' FSL & 990' FWL, Sec. 27,  
T-17-S, R-29-E Elev. - 3525' GR.



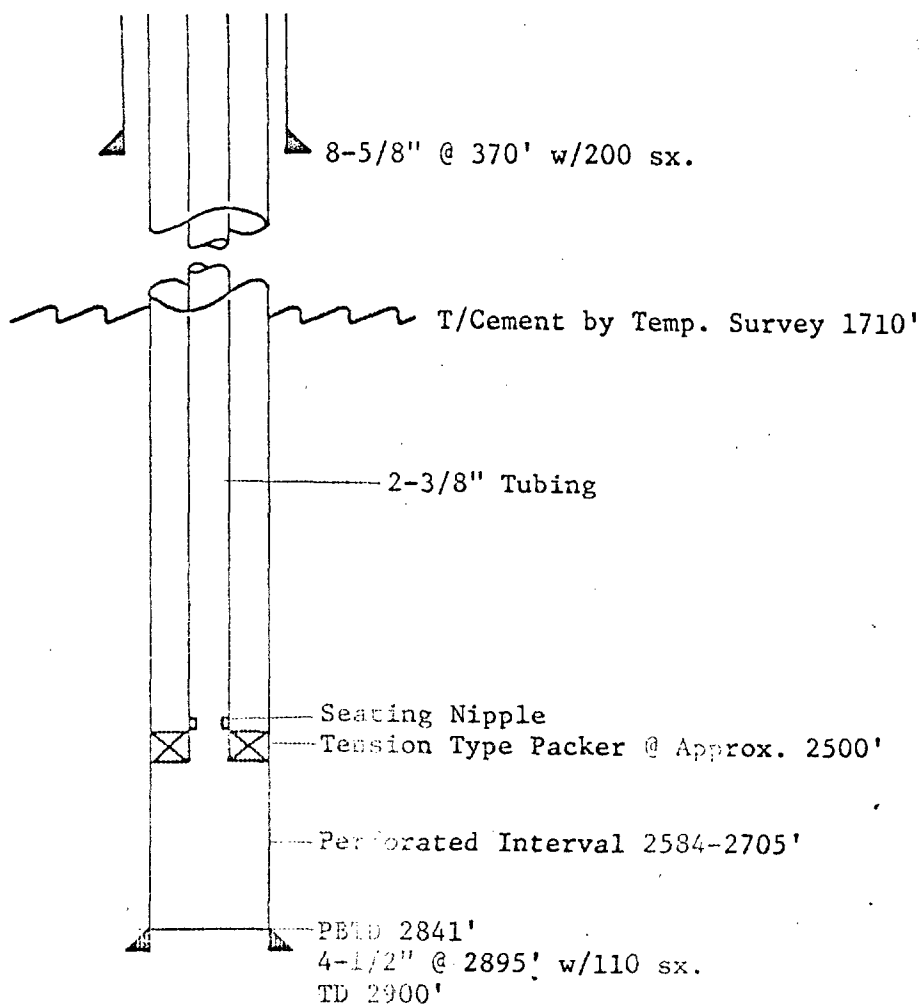
Water will be injected into Oolitic Zone of San Andres in open hole interval 2590-2760' below a tension type Packer. The tubing-casing annulus will be loaded with corrosion inhibited fluid.



**TENNECO OIL COMPANY**  
SUBSIDIARY OF TENNECO CORPORATION

**PROPOSED WATER INJECTION WELL**

G - J West Coop. Ut, Well No. 11  
1980' FNL & 330' FWL  
Sec. 28, T-17-S, R-29-E  
Grayburg Jackson Field  
Elev. 3586 RKB



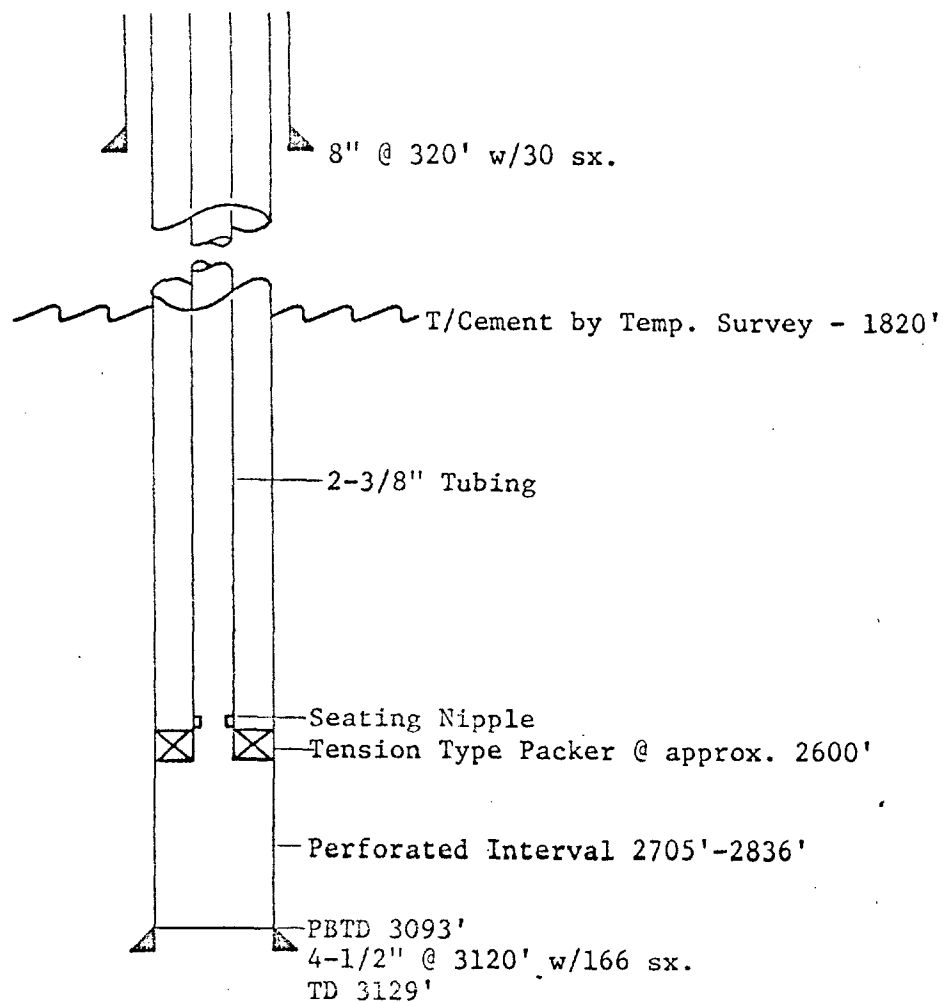
Water will be injected into Oolitic Zone of San Andres thru perforated interval 2584-2705' below a tension type packer. The tubing-casing annulus will be loaded with corrosion inhibited fluid.



TENNECO OIL COMPANY  
SUBSIDIARY OF TENNECO CORPORATION

PROPOSED WATER INJECTION WELL

G - J West Coop. Ut, Well No. 19  
2173' FWL & 467' FNL  
Sec. 28, T-17-S, R-29-E  
Grayburg Jackson Field  
Elev. 3559' RKB



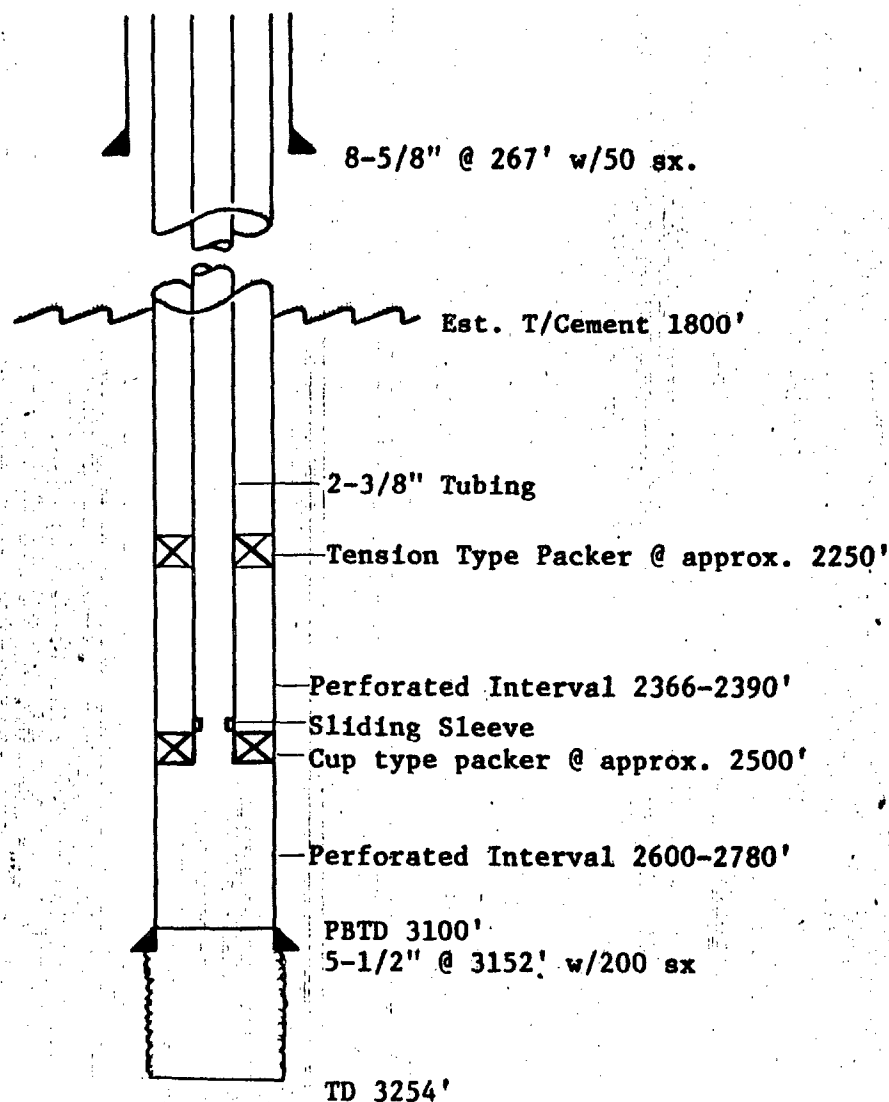
Water will be injected into Oolitic zone of San Andres thru perforated interval 2705-2836' below a tension type packer. The tubing-casing annulus will be loaded with corrosion inhibited fluid.



**TENNECO OIL COMPANY**  
SUBSIDIARY OF TENNECO CORPORATION

**PROPOSED WATER INJECTION WELL**

G - West Coop. Ut. Well No. 1  
877' FSL & 908' FWL  
Sec. 28, T-17-S, R-29-E  
Grayburg Jackson Field  
Elev. 3550' GR



Water will be injected into Oolitic zone of San Andres in perforated interval 2600-2780' below a cup type packer. The Premier perforated interval will be segregated between the lower cup type packer and an upper tension type packer. The tubing-casing annulus above the tension type packer will be loaded with corrosion inhibited fluid. At a later date when an agreement can be worked out with the offset operator to flood the Premier zone, 1" tubing will be run inside of the 2-3/8" tubing with a seating shoe to seat in sliding sleeve below circulating ports in sliding sleeve. Then water will be injected into Oolitic zone thru 1" tubing and into the Premier zone thru 1" - 2" tubing annulus.



**TENNECO OIL COMPANY**  
SUBSIDIARY OF TENNECO CORPORATION

**PROPOSED WATER INJECTION WELL**

G - J West Coop. Ut., Well No. 17  
330' FNL & 330' FWL  
Sec. 28, T-17-S, R-29-E  
Grayburg Jackson Field  
Elev. 3547'



66 Dec 1 PM 2 10

November 17, 1966

Tenneco Oil Co.  
P. O. Box 1031  
1800 Wilco Building  
Midland, Texas

Attn: Mr. A. W. Lang

Re: Crayburg-Jackson Waterflood  
T-17-S, R-29-E, Eddy Co.,  
New Mexico

Dear Sir:

Please refer to the past correspondence and discussions with your company. Mr. Plemons and myself are interested in the possibilities of a cooperative waterflood agreement with our off-set operators on a fair and equitable basis. We are, as we mentioned in letter dated January 17, 1966, of the opinion that under present conditions our lease is not ready to waterflood, especially your last proposal dated October 28, 1966. I will set out some of the reasons.

- A. Allowable factor, due to fact that we only have the 80 acres.
- B. We are producing the allowable at the present time.
- C. We are producing from several different zones other than the Oolitic zone from 2600'-2800' as you mentioned in your letter dated June 22, 1966.
- D. Lack of agreement or any proposal from Sinclair Oil and Gas Co. and Sunray D-X Oil Co.

I hope you can appreciate our position in this project. As we mentioned to your company representatives when talking to them that we do not want any of our off-set operators production and do not want to flood any of our production off our lease.

Please refer to paragraph four of letter to Tenneco Oil Co., dated June 28, 1966. We want and will expect an agreement (not only to your mentioned well #17) as to the injection rate, pressure, amount being injected, and zones in which water is being injected into in any off-set injection well from any off-set operator, and will expect them to have the same rights.

I propose to drill an injection well (subject to Mr. Plemons' approval--he is out of town at present time) 2690' from North and 1310' from West line of Sec. 27, T-17-S, R-29-E, Eddy County, New Mexico, and each interest holder pay their

Tenneco Oil Co.  
Midland, Texas

November 17, 1966  
Page 2

proportional share of the cost according to the benefits derived thereof.

Please advise the results of your contacts with Sunray D-X Oil Co. and Sinclair Oil & Gas Co.

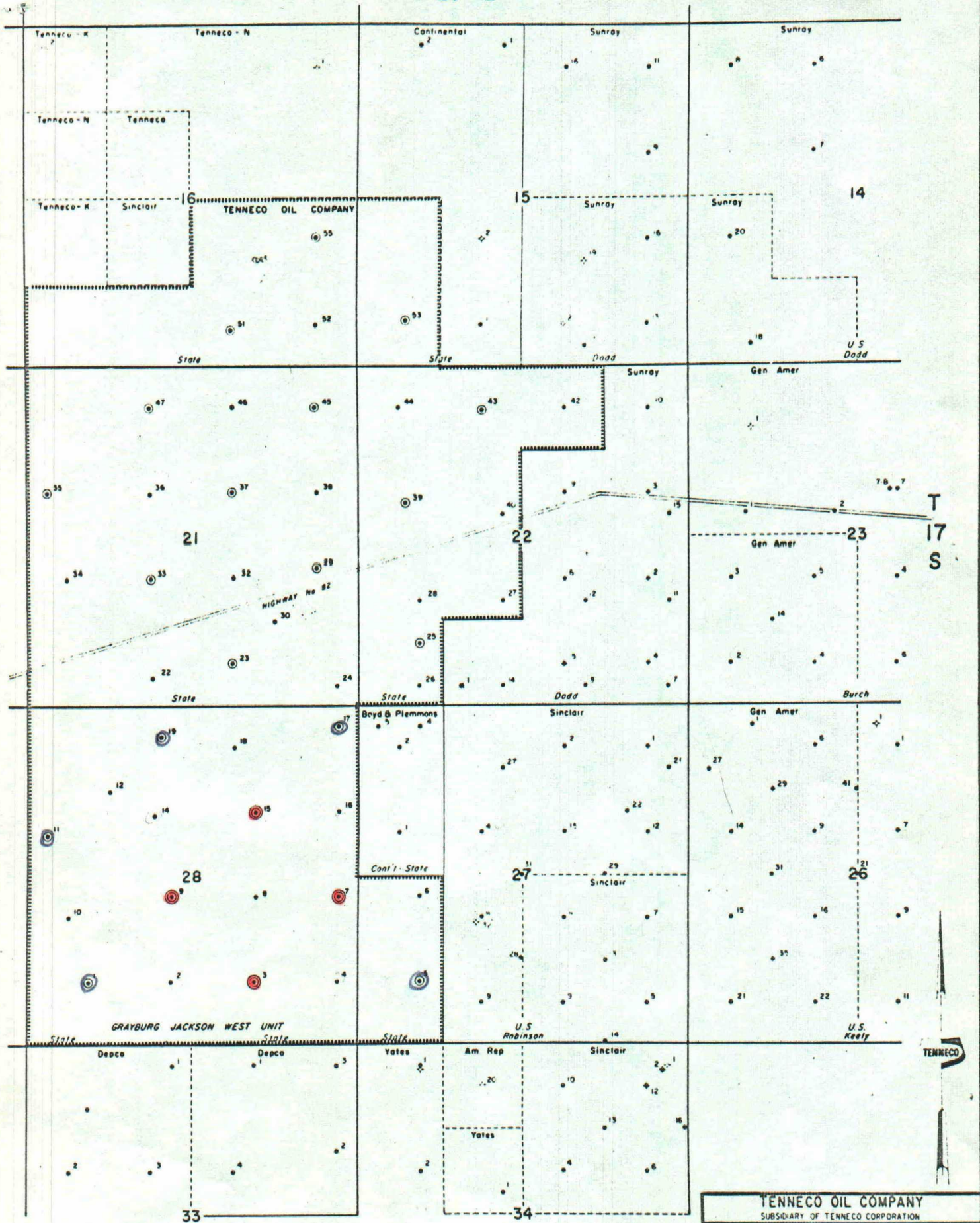
Very truly yours,

BOYD-PLEMONS

By Tom Boyd  
Tom Boyd, Co-Owner

TB:de

R-29-E



LEGEND



## INJECTION WELLS



### PROPOSED INJECTION WELLS

**TENNECO OIL COMPANY**  
SUBSIDIARY OF TENNECO CORPORATION

**GRAYBURG JACKSON FIELD**  
EDDY COUNTY, NEW MEXICO

GRAYBURG JACKSON WEST UNIT  
WATERFLOOD PROJECT

SCALE IN FEET

1000 500 0 1000 2000

OBJECTION  
TO

DEC 1 1966

510 West Texas Avenue  
Artesia, New Mexico  
November 29, 1966

Mr. A. L. Porter, Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Tenneco Oil Company for administrative approval, pursuant to Oil Conservation Commission Order R-3069, for the conversion of its wells Nos. 1, 5, 11, 17 and 19 to water injection in the Grayburg Jackson Pool, Eddy County, New Mexico.

We are the owners of the W/2 NW/4 of Section 27, Township 17 South, Range 29 East, N.M.P.M., Eddy County, New Mexico, offsetting Tenneco Oil Company's well No. 17, and we have five wells producing from or open to, among other zones, the Oolitic zone of the San Andres formation. We have been negotiating with Tenneco Oil Company for the past eleven months concerning a cooperative lease line agreement. In these negotiations, representatives of Tenneco agreed that after fillup was reached, injection volumes would be reduced to approximately 100 barrels of water per day but not in excess of 140 barrels. Our latest letter to this company was dated November 17, 1966, and a copy is attached to this letter for your information.

At this writing the present problems exist with respect to the conversion by Tenneco Oil Company of its well No. 17, to-wit:

1. Our 80-acre tract is presently producing all of the allowable.
2. The wells on our 80-acre tract are, in addition to the Oolitic zone of the San Andres, producing from

Mr. A. L. Porter, Secretary-Director

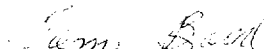
-2-


several other zones in the same vertical vicinity of the Oolitic.

3. Sunray Oil Company and Sinclair Oil Company offset our lease and, to the best of our knowledge, these companies have not given any indication of their intention to back up any water flood of our lease.
4. It is our opinion that the injection of 500 barrels of water per day into well No. 17 will result in channeling of water in the Oolitic zone to our immediately offsetting well No. 5 and will also prevent us from recovering the oil in place under our lease.

We do not wish to hinder or delay the expansion of the flood by Tenneco Oil Company but for the reasons above set forth we must object to the conversion by Tenneco Oil Company of its well No. 17 until such time as a satisfactory agreement has been reached with respect to the pressure and amount of water which will be injected into this well.

Respectfully submitted,

  
Tom Boyd

  
Jack Plemmons

Enclosure

cc: Tenneco Oil Company  
P. O. Box 1031  
Midland, Texas

Attention: Mr. A. W. Lang  
District Production Superintendent



# WELEX



## RADIOACTIVITY LOG

COMPANY STATE "B" 514 WELL GRAYBURG-JACKSON FIELD EDDY COUNTY NEW MEXICO STATE NEW MEXICO	COMPANY	LEONARD OIL COMPANY					
	WELL	STATE "B" 514 # 17					
	FIELD	GRAYBURG-JACKSON					
	COUNTY	EDDY	STATE	NEW MEXICO			
	Location		Other Logs				
330' FNL 330' FEL SEC. 28 TWP. 17-S RGE. 29-E							
Sec. _____ Twp. _____ Rge. _____		Elevation					
GROUND LEVEL Elev. 3547		KB. 3549					
DERRICK FLOOR		DF. 3549					
DERRICK FLOOR		GL. 3547					
Log		GAMMA N. GAMMA					
No. 12-13-59		12-13-59					
Depth Driller 3257		3257					
Depth Driller 3257		3257					
Depth Well 3254		3254					
Begin 3244		3254					
End SURF		SURF					
Date							
Type Fluid in Hole WATER		WATER					
Salinity PPM Cl							
Weight lb./gal. 1163		1163					
Fluid Level 91		91					
Hole Temp.							
Recorded By P. C. HARRIS							
Inspected By MR. F. NIX							
BORE HOLE RECORD		CASING RECORD					
Run	Bit	From	To	Size	Wgt.	From	To
10"	0	267	8-5/8"	0	267		
8"	267	2742					
6-1/8"	2742	3257					

Reproduced By  
**West Texas Electrical Log Service**

Dallas 2, Texas

REFERENCE A9435D

9 COMPLETION RECORD

SPUD DATE

COMP DATE

[illegible]

SCHLUMBERGER		FORMATION DENSITY LOG	
		Gamma Gamma	
		SCHLUMBERGER WELL SURVEYING CORPORATION	
		Houston, Texas	
COUNTY FIELD LOCATION WELL COMPANY	COMPANY <u>TERRACO OIL COMPANY</u>		
	WELL <u>STATE L #22</u>		
	FIELD <u>LOCO HILLS</u>		
	COUNTY <u>EDDY</u> STATE <u>N.M.</u>		
Location: <u>330 FNL</u> <u>1980 FNL</u>		Other Services: <u>NONE</u>	
Sec. <u>28</u> Twp. <u>17-A</u> Rge. <u>29-E</u>			
Permanent Datum: <u>GROUND LEVEL</u> ; Elev.: <u>3577</u> Elev.: <u>K.B. 3586</u>			
Log Measured From <u>K.B.</u> , <u>9</u> Ft. Above Perm. Datum <u>D.F. 3585</u>			
Drilling Measured From <u>K.B.</u> <u>G.I. 3577</u>			
Date <u>6/12/66</u>			
Run No. <u>ONE</u>			
Type Log <u>PDC &amp; GR</u>			
Depth—Driller <u>2760</u>			
Depth—Logger <u>2757</u>			
Bottom logged interval <u>2756</u>			
Top logged interval <u>0</u>			
Type fluid in hole <u>AIR</u>			
Salinity, PPM Cl. <u>-</u>			
Density <u>-</u>			
Level <u>-</u>			
Max rec. temp., deg F. <u>101</u>			
Operating rig time <u>2 HRS.</u>			
Recorded by <u>TARRALL</u>			
Witnessed by <u>DESADIER &amp; POOL</u>			
RUN No.	Bit	From	To
1	6 3/4	CSG	TD
		Size	Wgt
		8 5/8	
BORE HOLE RECORD		CASING RECORD	
		From	To
		SURF	370

*Grayson Jackson Unit  
Capitan Unit  
WCC 11*

Reproduced By

West Texas Electrical Log Service

MIDLAND, TEXAS 79701

REFERENCE W8165K



COMPLETION RECORD

SPUD DATE