(November 1983)
(Formerly 9-331)

DEPARTMENT OF THE INTERIOR
(Other instructions on reverse side)

Expires August 31, 1985

BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.: NM 033503

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL [X] GAS WELL [ ] OTHER: Salt Water Disposal

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Tenneco Oil Company

8. FARM OR LEASE NAME: Jennings Federal

3. ADDRESS OF OPERATOR: 7990 IH 10 West, San Antonio, TX 78230

9. WELL NO.: 1

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 660 FNL & 1980 FWL

10. FIELD AND POOL, OR WILDCAT: Double X Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 14, T24S, R32E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 3635 KB

12. COUNTY OR PARISH: Lea

13. STATE: New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other)			[ ]
(Other) convert to SWD			[X]	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1. MIRU PU. POOH w/rods and pump. NUBOP. Tag bottom and tally tubing out of hole.
2. RIH w/ 2 3/8" 8RD J55 and 4½" treating packer. Drop standing valve and test tubing to 1000#. Recover standing valve. Set packer at ± 4920'. Load backside w/60 BBLS. 2% KCL and test to 500#.
3. Clean Delaware perfs (4956'-70'-2 SPF) w/500 gals xylene. Let sock 8 hours. Pump 4000 gals. 15% HCL w/iron control and oxygen scavenger. (Maximum treating pressure: 500 psi) Displace tubing w/19 bbls 2% KCL. Unset Pkr.
4. POOH w/tbg. and Pkr., laying tubing down in singles. RIH w/ 2 3/8" 8RD J55 plastic coated tubing and a Guiberson uni-pak I plastic coated Pkr.
5. Circulate hole (81 bbls. should fill casing) w/packer fluid (2% KCL containing corrosion inhibitor, biocide, and oxygen scavenger).
6. Set packer at ± 4850'. NDBOP.
7. RD PU. Hook up injection line.

18. I hereby certify that the foregoing is true and correct

SIGNED Victor Saucedo TITLE Production Engineer DATE 9/11/84

(This space for Federal or State office use)

APPROVED BY _____ TITLE AREA MANAGER CARLSBAD DATE 11-6-84

CONDITIONS OF APPROVAL, IF ANY:

Subject to Like Approval by State

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Tenneco Oil
Exploration and Production
A Tenneco Company

7990 IH 10 West
San Antonio, Texas 78230
(512) 366-8000

Southwestern Division

September 11, 1984

Bureau of Land Management
P.O. Drawer 1857
Roswell, New Mexico 88201

RE: Federal Lease NM-033503
Jennings Federal #1
Application to Convert to Salt Water Disp.

Gentlemen:

An application to convert the Jennings Federal #1 to a salt water disposal is attached.

The following is a summary of pertinent information.

Well Name:	Jennings Federal #1
Location:	660 FNL & 1980 FWL Sec. 14, T24S, R32E Lea County, New Mexico
Serial No.:	NM-033503
Surface Owner:	State of New Mexico
Volume of Water To Be Disposed Of:	200 BWPD (Max.)
Source of Disposed Water:	Jennings Federal #2, #4, and Ernest Federal #1 - Delaware Produced Water
Water Analysis:	Attached
Injection Formation and Interval:	4956'-70' Delaware
Fresh Water in Area:	Attached

Casing and Cement Data:

Surface:	8-5/8" 24 #/FT J55 csg in 12-1/4" hole at 315' w/150 sx reg cmt and 50 sx reg w/2% HA 5. Cmt circulated.
Production:	4-1/2" 9.5 #/ft J55 csg in 7-7/8" hole at 5017' w/150 sx 50-50 Pozmix "s" - 2% gel and 50 sx latex cement. Top of cement at 4400' from temperature survey.
TD, PBTD:	TD - 5019' PBTD - 4986'
Proposed Completion:	Attached

If there are any questions on the above applicatiion, please call Darnell Knippa at (512) 366-8005.

Sincerely,

Leticia Samudio
Production Engineer

LS/bh/2416F

July 25, 1984

Re: CONVERSION JENNING FED. #1
TO SALT WATER DISPOSAL WELL

In the area of the subject well there are two water aquifers, the Ogalalla Formation (approximately 100' below ground level) and the Triassic (500-600' below G.L.). There are a few wells which produce water from shallow alluvial deposits. Examination of geological data, including well logs, shows no faulting from the Delaware to surface in the area of the subject well. The perfs at 4956'-70' would be of no hazard to the aquifers previously mentioned; as the Lamar Lime, which is over 30' thick (including shale sections) and low porosity due to the shale content, would block upward migration of the injected water. Over 200' of anhydrite above the Lamar Lime, plus the physical distance of over 4000' between the injection zone and the aquifers, should also preclude the possibility of aquifer contamination. (Assuming a good cement job).

The following is a list of water wells within a 4 mile radius of the subject well:

LOCATION	TO	HORIZON-AQUIFER
T24S R32E Sec. 3, NW NE SE	500'	Ogalalla
T24S R32E Sec. 3, NE NE SW	550'	Ogalalla
T24S R32E Sec. 10, SE SE SW	60'	N.A. (Alluvium)
T24S R32E Sec. 33, NE NE SE	367'	N.A. (Not available)
T24S R33E Sec. 9, SE SW NE	N.A.	N.A.
T24S R33E Sec. 10, NW SW NW	36'	Alluvium
T24S R33E Sec. 17, SE SE SE	N.A.	Ogalalla
T24S R33E Sec. 23, SW NW SW	230' (Plugged)	N.A.
T24S R33E Sec. 33, NE SW NE	N.A.	Ogalalla

Data on water aquifers and water wells was obtained from Jim Wright, New Mexico State Engineers Office, Roswell, New Mexico (505-622-6521).

Dave Breedon
Geological Engineer

CLR/dt/00988

Jennings Federal #1

U PU. POOH w/ rods and pump. NUBOP. Tag bottom and tally tbg out of e. (If there is fill above 4980', clean out w/ hydrostatic bailer).

w/ 2 3/8" 8rd J55 and 4 1/2" treating packer. Drop standing valve & t tubing to 1000#. Recover SV. Set packer at ± 4920'. Load backside 60 bbls 2% KCL and test to 500#.

an Delaware perfs (4956'-70'-2SPF) w/ 500 gals xylene. Let soak 8 rs. Pump 4000 gals 15% HCL w/ iron control and oxygen scavenger. ximum treating pressure: 500 psi). Displace tubing w/ 19 bbls 2% .. Unset packer.

)H w/ tbg and packer laying tubing down in singles. RIH w/ 2 3/8" 8rd 5 plastic coated tubing and a Guiberson UNI-PAK I plastic coated packer

rculate hole (81 bbls should fill casing) w/ packer fluid (2% KCL ntaining corrosion inhibitor, biocide and oxygen scavenger).

t packer at ± 4850'. NDBOP.

PU. Hook up injection line.

/blr/LS

15' w/200 sx SURFACE.

5017' w/200 sx 50'

III

JENNINGS FEDERAL #1
WELL DATA

A) Jennings Federal #1
660 FNL & 1980 FWL
SEC. 14, T24S, R32E

8 5/8" 24# J55 CSA 315' in a 12 1/4" hole w/ 200 sx. cement circulated to surface.

4 1/2" 9.5# J55 CSA 5017' in a 7 7/8" hole w/200 sx. cement. Top of cement @ 4400' by temperature survey.

2 3/8 8rd J55 internally plastic coated tubing set at ± 4850'.

Guiberson UNI-PAK I plastic coated packer set at ± 4850'.

B) 1. Injection Formation - Delaware
2. Injection Interval -4956-70' (Perforated)
3. Original Purpose - Oil Well
4. No other Perforations

2185F/blr/LS

VII

1. Average daily rate - 100 BWPD
   Maximum daily rate - 200 BWPD
   Volume (22 years) - 803,000 BBLS

2. System is closed

3. Average injection pressure - 550 psi
   Maximum injection pressure - 750 psi

VIII

Injection zone - Delaware sand, fine - grained sandstone, 65' thick and depth 4956' Aquifer - Carlsbad water Basin, Santa Rosa (300' and up).

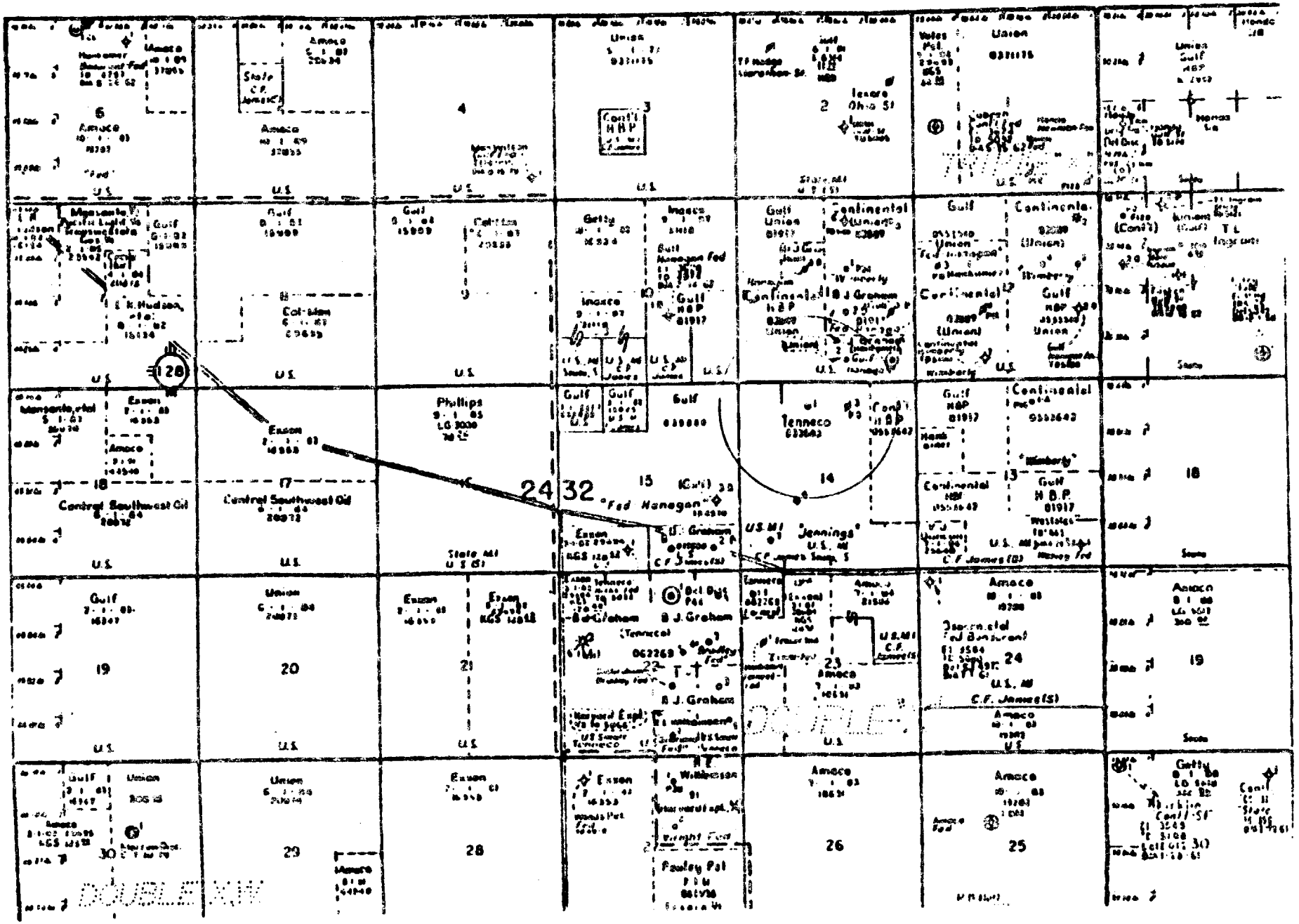
IX - Xylene/HCL cleanup

X - Logs already on file

XI - Not applicable

XII - Attached

XIII - Proof of Notice - attached



DOUBLE X DELAWARE

PETROLITE CORPORATION

TRETOLITE
369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3500/TWX 910-760-1660/Telex 44-2417

WATER ANALYSIS REPORT

COMPANY Tenneco ADDRESS Ja 1 N.M. DATE: 9/18/84

SOURCE Jennings DATE SAMPLED 9/15/84 ANALYSIS NO.

Analysis		Mg/L		*Meq/L	
1.	pH	5.9			
2.	H_2S (Qualitative)	pos			
3.	Specific Gravity	1.160			
4.	Dissolved Solids	229292			
5.	Suspended Solids				
6.	Phenolphthalein Alkalinity ($CaCO_3$)				
7.	Methyl Orange Alkalinity ($CaCO_3$)	140			
8.	Bicarbonate (HCO_3)	HCO_3 171	÷61	3	HCO_3
9.	Chlorides (Cl)	Cl 142972	÷35.5	4027	Cl
10.	Sulfates (SO_4)	SO_4 225	÷48	5	SO_4
11.	Calcium (Ca)	Ca 21400	÷20	1070	Ca
12.	Magnesium (Mg)	Mg 4010	÷12.2	329	Mg
13.	Total Hardness ($CaCO_3$)	70000			
14.	Total Iron (Fe)				
15.	Barium (Qualitative)				
16.	Strontium				

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

1070	Ca ← → HCO_3	3
329	Mg → → SO_4	5
2636	Na ← → Cl	4027

Compound	Equiv. Wt.	X Meq/L	= Mg/L
Ca $(HCO_3)_2$	81.04	3	243
Ca SO_4	68.07	5	340
Ca Cl_2	55.50	1062	58941
Mg $(HCO_3)_2$	73.17		
Mg SO_4	60.19		
Mg Cl_2	47.62	329	15667
Na HCO_3	84.00		
$Na_2 SO_4$	71.03		
Na Cl	58.46	2636	154101

Saturation Values Distilled Water 20°C

Ca CO_3	13 Mg/L
Ca $SO_4 \cdot 2H_2O$	2,090 Mg/L
Mg CO_3	103 Mg/L

REMARKS

Respectfully submitted
TRETOLITE

PETROLITE CORPORATION

TRETOLITE
369 Marshall Avenue / Saint Louis, Missouri 63119
(314) WO 1-3500/TWX 910-760-1660/Telex 44-2417

WATER ANALYSIS REPORT

COMPANY Tenneco ADDRESS Ja 1 N.M. DATE: 9/18/84

SOURCE Ernest DATE SAMPLED 9/15/84 ANALYSIS NO.

	Analysis		Mg/L		*Meq/L	
1.	pH	5.9				
2.	H_2S (Qualitative)	pos				
3.	Specific Gravity	1.155				
4.	Dissolved Solids		225069			
5.	Suspended Solids					
6.	Phenolphthalein Alkalinity ($CaCO_3$)					
7.	Methyl Orange Alkalinity ($CaCO_3$)		70			
8.	Bicarbonate (HCO_3)	HCO_3	85	÷61	1	HCO_3
9.	Chlorides (Cl)	Cl	140471	÷35.5	3 957	Cl
10.	Sulfates (SO_4)	SO_4	225	÷48	5	SO_4
11.	Calcium (Ca)	Ca	21000	÷20	1050	Ca
12.	Magnesium (Mg)	Mg	4034	÷12.2	331	Mg
13.	Total Hardness ($CaCO_3$)		69100			
14.	Total Iron (Fe)					
15.	Barium (Qualitative)					
16.	Strontium					

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

*		*
1050	Ca ← → HCO_3	1
331	Mg → → SO_4	5
2582	Na ← → Cl	3957

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca $(HCO_3)_2$	81.04		1		81
Ca SO_4	68.07		5		340
Ca Cl_2	55.50		1044		57942
Mg $(HCO_3)_2$	73.17				
Mg SO_4	60.19				
Mg Cl_2	47.62		331		15762
Na HCO_3	84.00				
Na_2SO_4	71.03				
Na Cl	58.46		2582		150944

Saturation Values Distilled Water 20°C

Ca CO_3	13 Mg/L
Ca $SO_4 \cdot 2H_2O$	2,090 Mg/L
Mg CO_3	103 Mg/L

REMARKS

Respectfully submitted
TRETOLITE