

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Continental Oil Company		ADDRESS Box 460 Hobbs, New Mexico	
LEASE NAME Payne	WELL NO. 11	FIELD El Mar	COUNTY Lea
LOCATION UNIT LETTER <u>H</u> WELL IS LOCATED <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>1650</u> FEET FROM THE <u>West</u> LINE, SECTION <u>30</u> TOWNSHIP <u>26S</u> RANGE <u>33E</u> NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	7 5/8	330	175	surface	circulated
INTERMEDIATE	-	-	-	-	-
LONG STRING	4 1/2	4786	650	1410	temp. survey
TUBING	2 3/8	4650'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tension Model AD or equivalent set at 4650'		

NAME OF PROPOSED INJECTION FORMATION Delaware		TOP OF FORMATION 4634	BOTTOM OF FORMATION Approx. 5750
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? tubing		PERFORATIONS OR OPEN HOLE? perfs.	PROPOSED INTERVAL(S) OF INJECTION 4675-81' 4749-51', & 4755-65'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? producing oil well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No

LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH			
-			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Est. 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA none	
DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA none			
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 150	MINIMUM 300	MAXIMUM closed	OPEN OR CLOSED TYPE SYSTEM pressure
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -		IS INJECTION TO BE BY GRAVITY OR PRESSURE? pressure	
WATER TO BE DISPOSED OF yes		APPROX. PRESSURE (PSI) 1500	
NATURAL WATER IN DISPOSAL ZONE yes		ARE WATER ANALYSES ATTACHED? no	

NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) USA, lessee Mrs. Ida Goedeke Box 1264 Jal, New Mexico
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LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Tenneco Oil Company, Box 1031, Midland, Texas
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BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. <u>2</u>
CASE NO. <u>3903</u>

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER no	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL no	THE NEW MEXICO STATE ENGINEER no
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA yes	ELECTRICAL LOG no	DIAGRAMMATIC SKETCH OF WELL no

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

[Signature] Asst. Division Manager September 26, 1968
(Signature) (Title) (Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Continental Oil Company		ADDRESS Box 460 Hobbs, New Mexico			
LEASE NAME Payne	WELL NO. 12	FIELD El Mar	COUNTY Lea		
LOCATION UNIT LETTER <u>F</u> ; WELL IS LOCATED <u>1935</u> FEET FROM THE <u>N</u> LINE AND <u>2090</u> FEET FROM THE <u>W</u> LINE. SECTION <u>31</u> TOWNSHIP <u>26S</u> RANGE <u>33E</u> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	7 5/8	332	175	surface	circulated
INTERMEDIATE					
LONG STRING	4 1/2	4777'	975	surface	circulated
TUBING	2 3/8	4650'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tension Model AD or equivalent @ 4650'		
NAME OF PROPOSED INJECTION FORMATION Delaware		TOP OF FORMATION 4618		BOTTOM OF FORMATION 5750	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? tubing		PERFORATIONS OR OPEN HOLES? perf.		PROPOSED INTERVAL(S) OF INJECTION 4733-40', 4666-71', 4685-94'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? no		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? producing oil well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Est. 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA none		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA none	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM 150	MAXIMUM 300	OPEN OR CLOSED TYPE SYSTEM none closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? none	APPROX. PRESSURE (PSI) 1500
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE		WATER TO BE DISPOSED OF yes		NATURAL WATER IN DISPOSAL ZONE yes	ARE WATER ANALYSES ATTACHED? no
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) USA Lessee Mrs. Ida Goedeke, Box 1264, Jal, New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Tenneco Oil Company, Box 1031, Midland, Texas Humble Oil & Refining Company, Drawer H, Monahans, Texas					
BEFORE EXAMINER NUTTER OIL CONSERVATION COMMISSION EXHIBIT NO. <u>3</u> CASE NO. <u>3903</u>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER no		THE NEW MEXICO STATE ENGINEER no	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA yes		ELECTRICAL LOG no	
				DIAGRAMMATIC SKETCH OF WELL no	

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

Asst. Division Manager

September 26, 1968

(Signature)

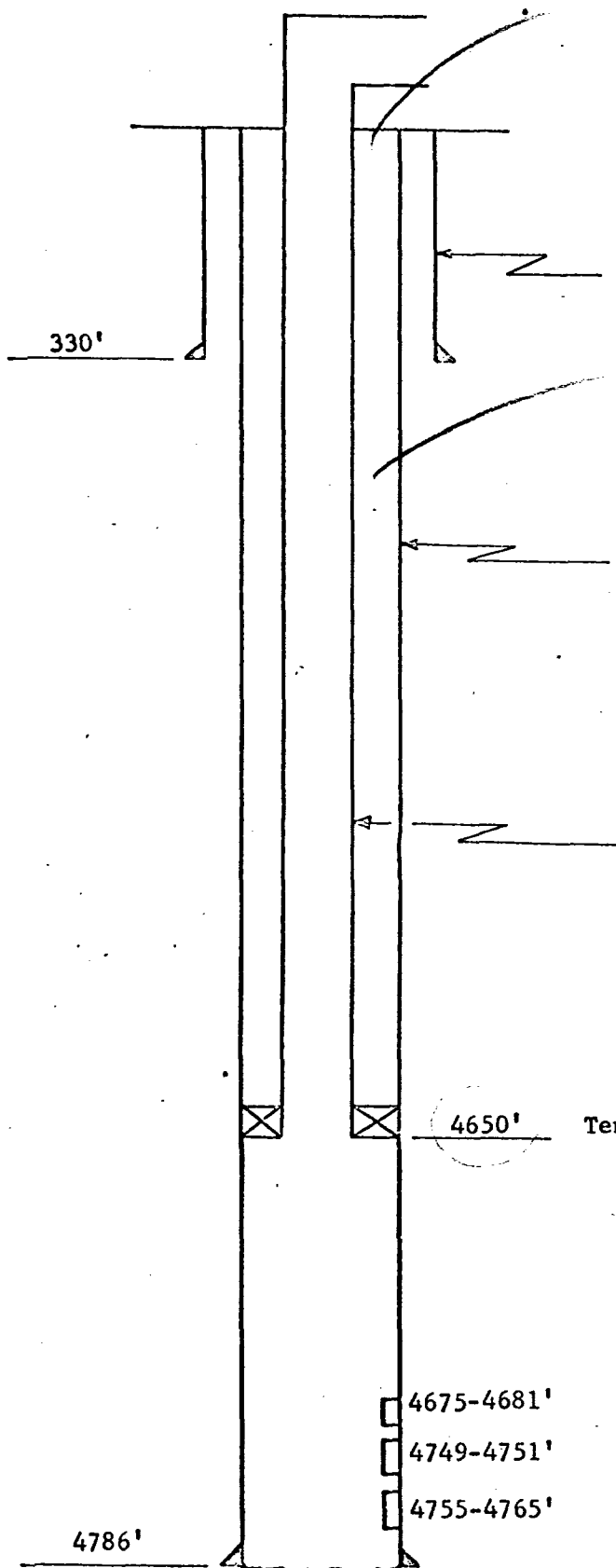
(Title)

(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing. If the applicant so requests. SEE RULE 701.

EXHIBIT NO. 3

Payne No. 11
1650' FWL & 660' FSL, Sec. 30, T-26S, R-33E
Elev. 3113' (11' above L.F.)



7 5/8" OD, 24#/ft, H-40
csg. cmtd. w/175 sacks
to surface

4 1/2" OD, 9.5#/ft, J-55
csg. cmtd. w/650 sacks to
1410'. Top determined by
temperature survey.

2 3/8" OD, 4.7#/ft. tbg.
cmt. lined

4650' Tension Packer

4675-4681'

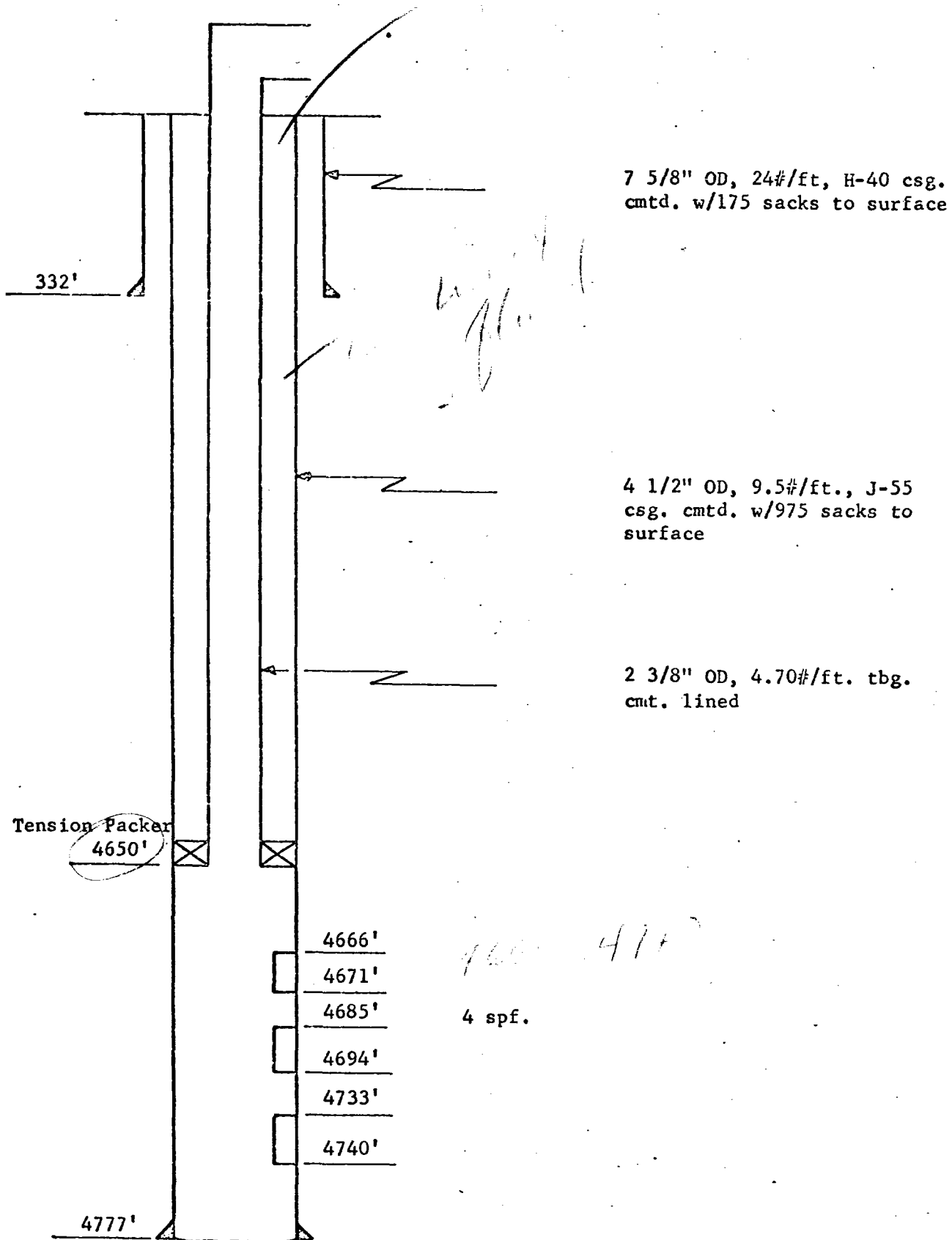
4749-4751'

4755-4765'

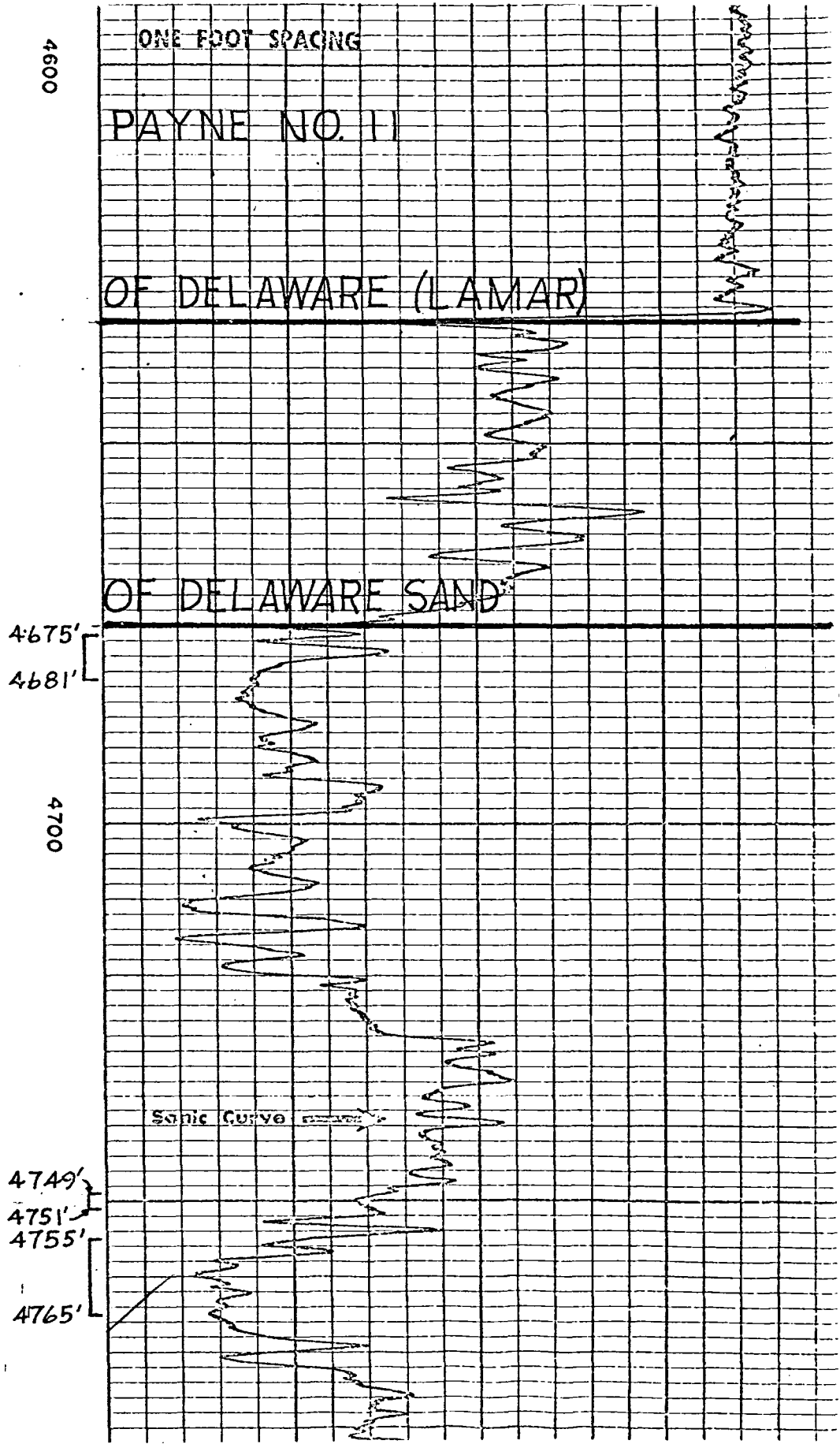
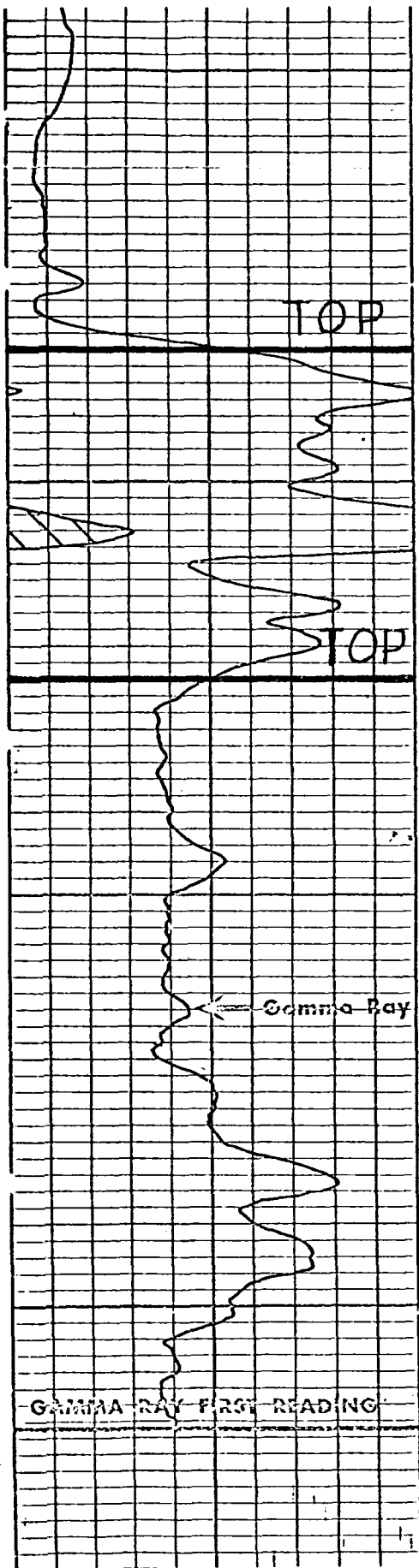
4 spf.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 4
CASE NO. 3903

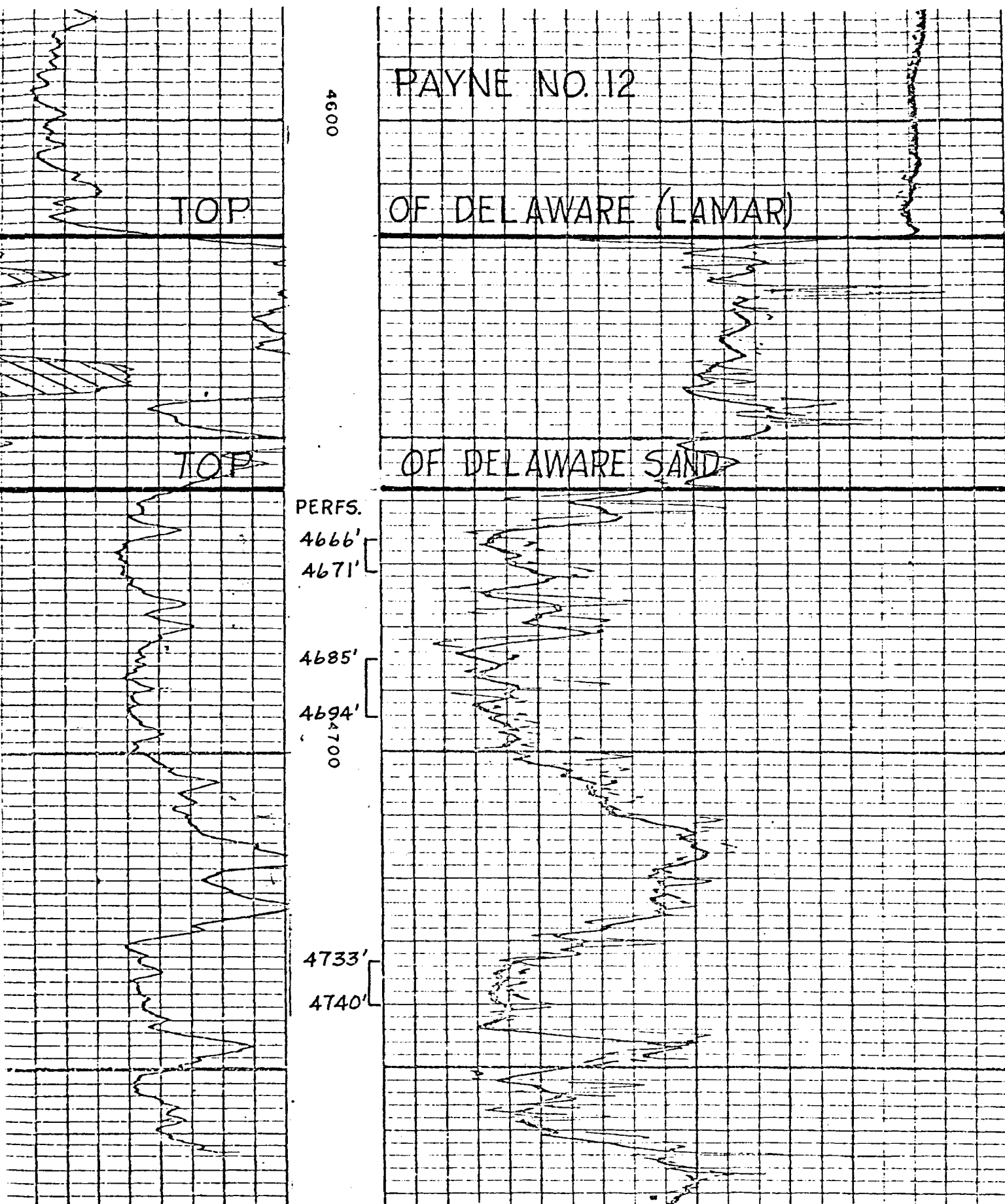
Payne No. 12
1935' FNL & 2090' FWL, Sec. 31, T-26S, R-33E
Elev. 3108' (11' above G.L.)



B. E. EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 3903

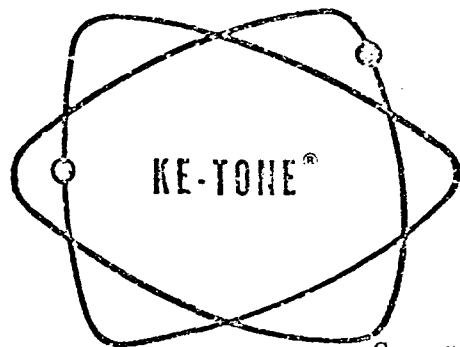


BEFORE EXAMINER NUTTER
CONSERVATION COMMISSION
EXHIBIT NO. 6
CASE NO. 3903



BEFORE EXAMINER NUTTER
CIL CONSERVATION COMMISSIC
EXHIBIT NO. 7
CASE NO. 3903

TELEPHONE: HOBBS 393-6215



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Continental Oil Company
Field El Mor Delaware Sand
Lease El Mar Sampling Date 6/24/68
Type of Sample Treater

WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	1357.28	27,200
Magnesium (Mg++)	386.86	4704
Sodium (Na+) (cal.)	2890.34	66,449
Iron		138
Bicarbonate (HCO ₃)	1.10	67
Carbonate (CO ₃ -)	NOT	FOUND
Hydroxide (OH-)	NOT	FOUND
Sulphate (SO ₄ -)	8.58	412
Chloride (Cl-)	4624.80	164,000
5.6 pH @ 68 °F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	1744.14	87,207
Carbonate Hardness, as CaCO ₃ (temporary)	1.10	55
Non-Carbonate Hardness as CaCO ₃ (permanent)	1743.04	87,152
Alkalinity as CaCO ₃	1.10	55
Specific Gravity @ 68° F	1.165	

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

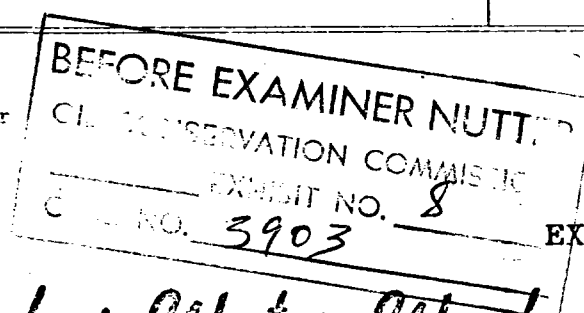
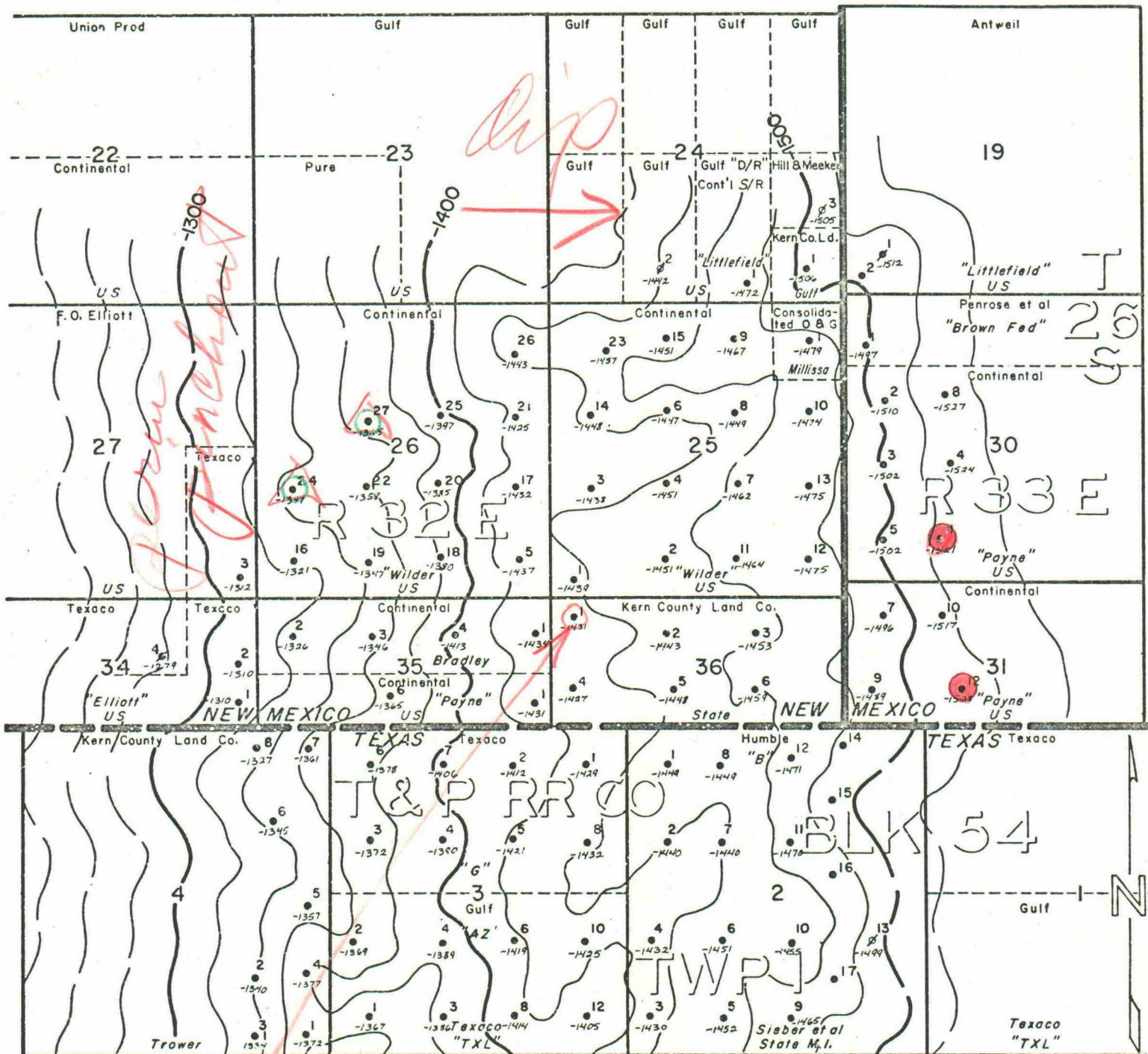


EXHIBIT NO. 8

Makes Water Work



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 9
CASE NO. 3903

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT—HOBBS DISTRICT

EL MAR-DELAWARE POOL
LEA COUNTY, NEW MEXICO
&
LOVING COUNTY, TEXAS

Contoured on T/Delaware Limestone
Contour Interval: 20'

Exhibit No. 9

1/6/67

SCALE IN FEET
0 660 1320 1980 2640