

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF TIDE WATER ASSOCIATED OIL COMPANY FOR AN ORDER DESIGNATING A NEW POOL, AND FOR A TEMPORARY ORDER ESTABLISHING PRORATION UNITS AND UNIFORM SPACING OF WELLS DRILLED TO THE SAME COMMON SOURCE OF SUPPLY IN THAT AREA COMPRISING SECTIONS 32 AND 33, TOWNSHIP 16 SOUTH AND SECTIONS 4 AND 5, TOWNSHIP 17 SOUTH, ALL IN RANGE 37 EAST, LEA COUNTY, NEW MEXICO.

Comes now, Tide Water Associated Oil Company, a Delaware Corporation, operating in New Mexico from a field office in Hobbs, New Mexico, and respectfully represents to the Oil Conservation Commission of the State of New Mexico that it has completed the State "P" No. 1-D, an exploratory well, at a location in the approximate center of SE/4 SE/4 Section 32, Township 16 South, Range 37 East, Lea County, New Mexico. This well, drilled to a total depth of 12,572 feet was plugged back and completed in the Strawn lime of the Pennsylvanian formation, through perforations 11,080-11,100 and 11,130-11,150 feet. The well was acidized with 6,000 gallons and commenced producing March 30, 1951. On initial test the well produced 766.87 barrels of 43.5 gravity oil in 24 hours through a 1/2 inch choke, tubing pressure 390 pounds, gas-oil ratio 1147 to 1.

Applicant's State "P" No. 1-D Well, above referred to, is the only well now producing in what is generally referred to as the East Lovington Pool. A diagonal offset has been commenced at a location in the approximate center of the NW/4 NW/4 Section 4, Township 17 South, Range 37 East, known as State "U" No. 1. It is estimated that State "U" No. 1 and subsequent wells will cost approximately \$200,000 and that 208 tons of pipe will be required to complete each producing well. In view of the critical shortage of pipe, especially of the grade and weight necessary to drill these deep wells, and the great expenditure of capital required, two factors are presented that make it desirable to develop the Pool on 80-acre units until and unless it is later found that such wells are not capable of efficiently and economically draining 80 acres. Further, 80-acre units will make it possible to more rapidly define the extent of the reservoir with fewer wells and determine ultimate recoverable oil reserves.

Applicant believes and respectfully submits unto the Commission that 80-acre proration units would be in the interest of conservation of steel which in turn would be in the interest of the general public, the State, and would preserve correlative rights and equities.

The following owners of mineral working interests in the above mentioned four sections have pooled their interests and are participating proportionately in the development:

Tide Water Associated Oil Company, Operator  
The Atlantic Refining Company  
Mid-Continent Petroleum Corporation  
Shell Oil Company  
Sinclair Oil and Gas Company  
Texas Pacific Coal and Oil Company  
Mr. Geo. H. Coats, San Antonio, Texas  
Mr. W. B. Osborn, Jr., San Antonio, Texas

On the basis of the existing conditions, your applicant respectfully requests that the Strawn lime of the Pennsylvanian formation as found to be productive in Tide Water Associated Oil

Company, et al's, State "F" No. 1-D be designated as the East Lovington Pool; that a temporary order be promulgated, to be effective for a period of not less than one year, establishing proration units to be comprised of either the west and east halves or the north and south halves of each Governmental quarter section, and ordering that wells hereafter drilled in Sections 32 and 33, Township 16 South and Sections 4 and 5, Township 17 South, Range 37 East, Lea County, New Mexico, be located in the Southeast Quarter and the Northwest Quarter of each Governmental quarter section. It is further suggested to the Commission that the allowable production of each well located on such 80-acre unit be limited to the normal top allowable times the proportional depth factor of 5.67, this allowable to remain in effect until more production history and reservoir performance data becomes available, which, in the opinion of the Commission, justifies such change as it may deem to be necessary.

Attached hereto is a plat illustrating the lease conditions existing and the proposed plan of development.

Done at Houston, Texas, on this 18th day of May, 1951.

Respectfully submitted,

TIDE WATER ASSOCIATED OIL COMPANY

By: \_\_\_\_\_  
J. B. Holloway

WELL DATA

State "P" #1-D

Location: 660' FSL & FEL, Sec. 32, T-16-S, R-37-E, Lea County, New Mexico.

Elevation: 3799' DF.

Total Depth: 11,202' PB.

Casing:

Surface	13 3/8"	320'	350 Sacks cement
Intermediate	9 5/8"	4988'	3000 Sacks "
Production	7"	11,960'	750 Sacks "

Acidized: This well was treated with 6000 gallons of acid through casing perforations @ 11,080-11,100' and 11,130-50'; the well flowed 35 barrels of oil per hour after treatment.

Perforations: 11,080-11,100' and 11,130-11,150'

Initial Potential:

Flowed 767 Barrels of oil per day on 1/2" choke with a tubing pressure of 390 psig. and casing pressure of zero psig.; the gas-oil ratio was 1147 Cu.Ft./bbl. and the API gravity of the oil was 43.5 degrees.

STATIC BOTTOM HOLE PRESSURE

<u>Date</u>	<u>Period Shut in</u>	<u>Datum</u>	<u>Bottom Hole Pressure</u>	<u>Loss</u>
4-11-51	74 hrs.	- 7300'	3327 psig.	-
6-5-51	74 hrs.	- 7300'	2449 psig.	878 psig.

PRODUCTIVITY INDEX TEST

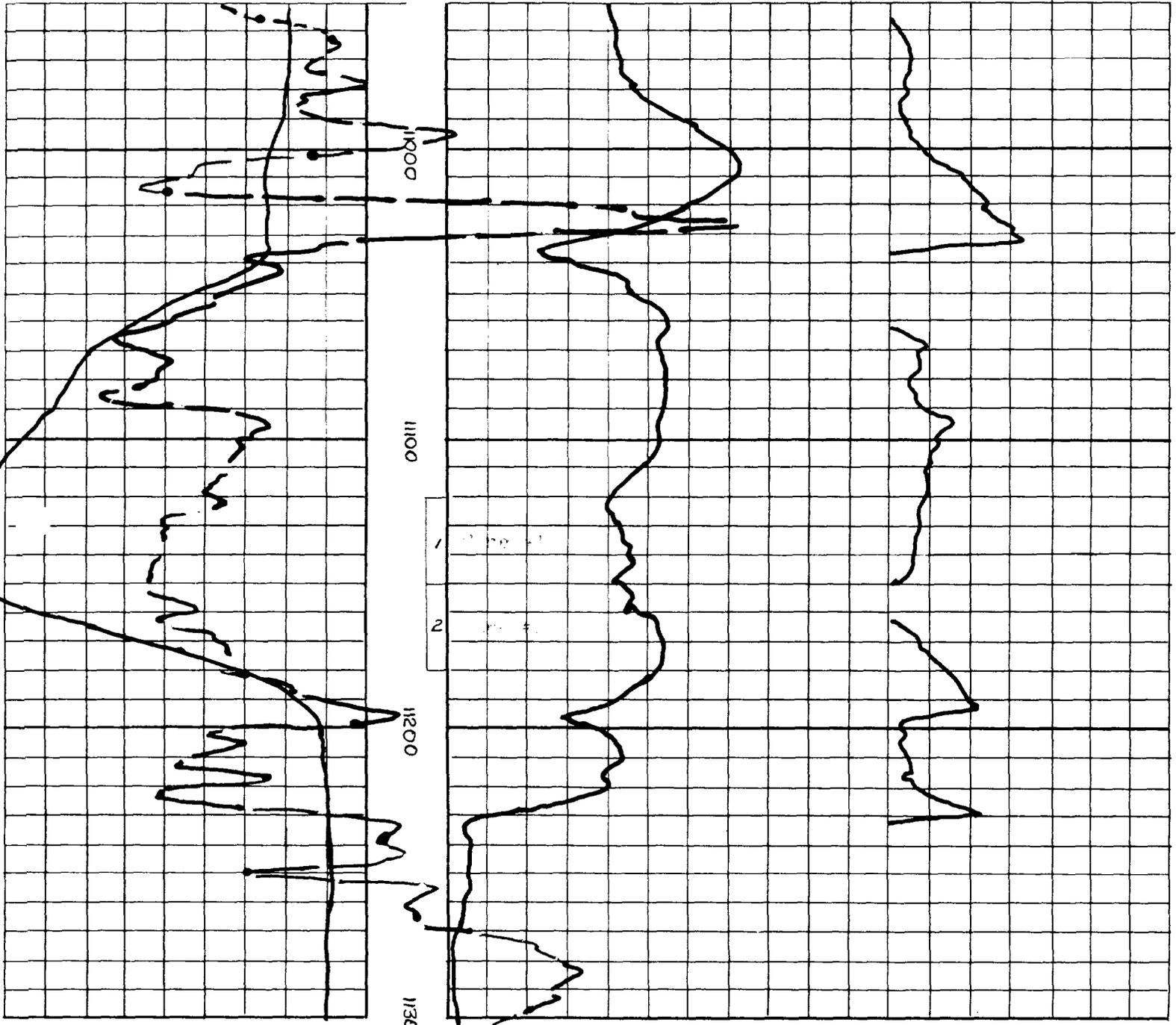
<u>Choke</u>	<u>Hours Flowing</u>	<u>Datum Pressure</u>		<u>Oil (B/D)</u>	<u>Gas-Oil Ratio (Cu.Ft./bbl.)</u>	<u>PI (BCPD/psi. drop)</u>
		<u>Initial</u>	<u>Final</u>			
1/2"	15	3327	2562	722.16	1035	0.938
3/8"	8	2562	2737	440.44	1086	0.739
1/4"	8	2737	2950	248.50	972	0.649

Taken From

SCHLUMBERGER ELECTRIC LOG

OPERATOR: Tide Water Associated Oil Company  
LEASE: State "P"  
WELL: # 1-D  
FIELD: Wildcat  
LOCATION: 660' fsl & fel/ Sec. 32-16S-37E

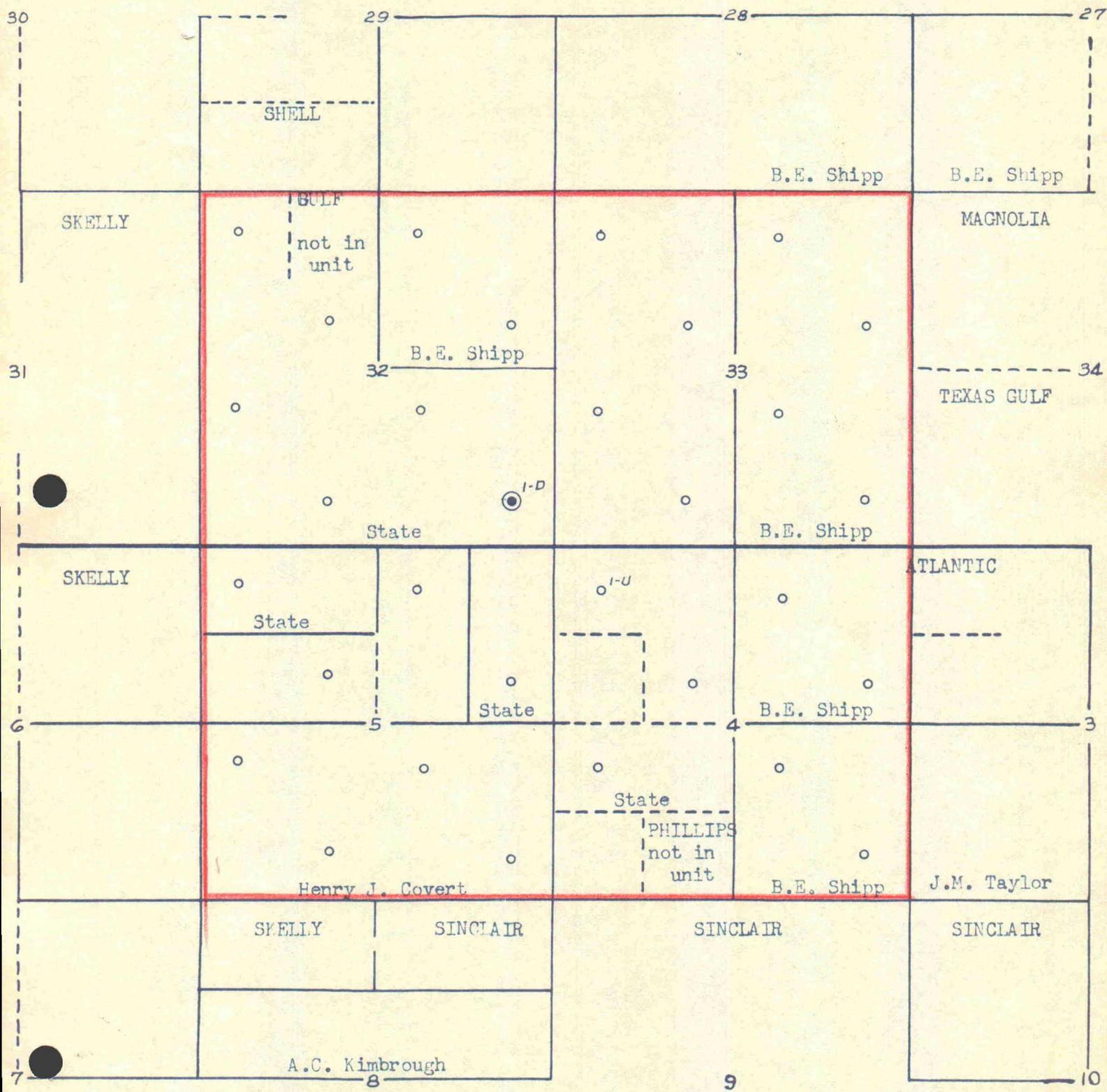
COUNTY: Lea  
STATE: New Mexico  
ELEV: 3799' DF.



Core #1: 11,120-50; rec. 27.5'  
of foss. lime; good  
por., stn., odor & flour  
throughout.

Core #2: 11,150- 80; Rec. 30' foss.lime;  
2' good por., stn.; 26' dnse.lime  
w/no por. or stn.; 1' blk.sh; 1'  
cherty brn. lime

Well Stem Test: 11,066-11,120; 2000' WB; opn 5 hrs, gas 40 min, shut in overnight; rec.  
5760' oil and 1980' WB; F.press. 1275-2575 psi.; 15 m. Shut in 3550 psi.



# TIDE WATER ASSOCIATED OIL COMPANY

MID-CONTINENT DIVISION  
MELLIE ESPERSON BLDG. POST OFFICE BOX 1404  
HOUSTON 1, TEXAS

May 18, 1951

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Attention: Mr. R. R. Spurrier, Secretary

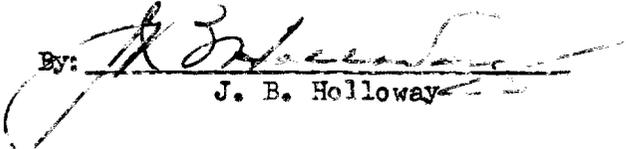
Gentlemen:

We are enclosing three copies of application for an order designating a new pool and for a temporary order establishing proration units and uniform spacing of wells drilled to the same common source of supply in that area comprising Sections 32 and 33, Township 16 South, and Sections 4 and 5, Township 17 South, all in Range 37 East, Lea County, New Mexico, in which area Tide Water Associated Oil Company recently completed its State "F" well No. 1-D.

It would be appreciated if hearing covering this matter could be held at your regular scheduled June 22nd session.

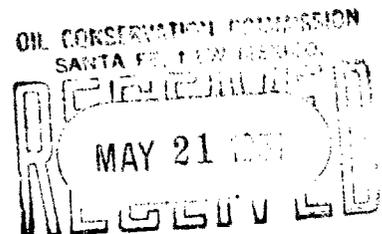
Yours very truly,

TIDE WATER ASSOCIATED OIL COMPANY

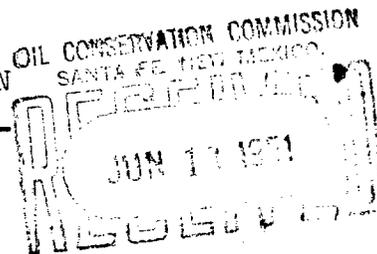
By: 

J. B. Holloway

JPH/pb  
Enc.



BEFORE THE OIL CONSERVATION COMMISSION  
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CASE 285

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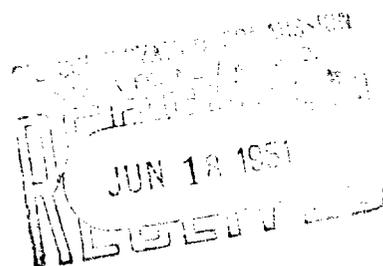
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