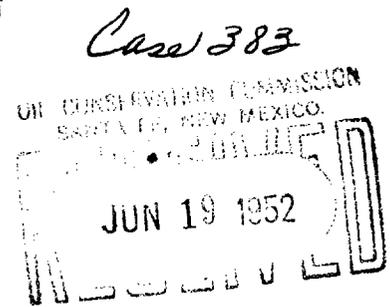


BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO



IN THE MATTER OF THE APPLICATION OF
TIDE WATER ASSOCIATED OIL COMPANY
FOR AN ORDER GRANTING PERMISSION TO
DUALY COMPLETE STATE "E" NO. 2 WELL,
EUNICE POOL, SE/4 SE/4, SECTION 16,
TOWNSHIP 21 SOUTH, RANGE 36 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO.

A P P L I C A T I O N

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 on May 18, 1936, it completed State "E" Well No. 2 located in the center of SE/4 SE/4 Section 16, Township 21 South, Range 36 East, N.M.P.M., Eunice Pool, Lea County, New Mexico; that said well is presently producing oil from the Grayburg-San Andres formation from open hole interval 3827 to total depth 3906 feet; that 7" casing is set and cemented at 3827 feet; that an intermediate string of 9-5/8" casing was set and cemented at 1579 feet.

Applicant further represents that a high pressure gas zone exists in the Yates-Seven Rivers formation, present and producing in the open hole interval 2995-3480 feet in Skelly Oil Company's State "E" No. 7 located in the SW/4 NW/4 Section 16, Township 21 South, Range 36 East and from other Bradenhead or dually completed wells in the area.

Applicant further represents that it is practical and economically feasible to dually complete the State "E" No. 2 well to produce oil from the Grayburg-San Andres formation through the tubing and gas from the Yates - Seven Rivers gas zone through the tubing-casing annulus with proper packer and well head connections, and in such manner that there will be no commingling of fluids between the two reservoirs.

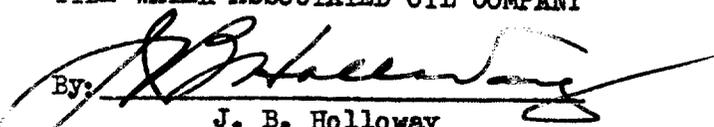
WHEREFORE, Applicant respectfully requests that this matter be set down for hearing on due notice, and that at such hearing it be authorized to dually complete said well in accordance with the foregoing petition and the rules and regulations of the Commission.

Attached hereto is a plat showing the location of the well proposed for dual completion and surrounding wells and leaseholds.

DONE at Houston, Texas, on this the 16th day of June, 1952.

Respectfully submitted

TIDE WATER ASSOCIATED OIL COMPANY

By: 

J. B. Holloway

Oil Conservation Commission
JUL 28 1932

With the exception of the different mineral ownership, this application for permission to dually complete our State "E" No. 2 well located in the center of SE/4 SE/4 of Section 16, Township 21 South, Range 36 East, Eunice Pool, Lea County, is identical in principle to a similar application made last month under Case No. 375.

Tide Water Associated Oil Company completed this well on May 18, 1936, which originally and presently is producing oil from the Grayburg-San Andres formation from open hole interval 3827 feet (the bottom of 7" casing) to 3906 feet, (the total depth of well). An intermediate string of 9-5/8" casing was set and cemented at 1579 feet.

The well was drilled prior to the time of the general use of electric logging, however, the driller's log shows gas zones were penetrated at several intervals commencing at 3180 feet, which zones are now identified in this area as being the Yates-Seven Rivers formation.

The only well in the area producing from the Yates-Seven Rivers formation and on which an electric log was run that we have a copy of is Skelly Oil Company's State "B" well No. 7, located approximately 4650 feet northwest of our well. Skelly's well is producing gas from the Yates-Seven Rivers formation from open hole interval 2995-3480 feet.

It is our opinion that it is practical and economically feasible to dually complete our State "E" No. 2 well in such manner that the Grayburg-San Andres formation would continue to be produced through the tubing, and gas from the Yates-Seven Rivers zones through the annulus between the tubing and casing, with no communication between the two producing formations.

If granted permission to dually complete the well, we propose before doing so to test the 7" casing with 1500 pounds pressure by running a retrievable

cement retainer equipped with a perforation above and bull plug below, to a depth below 3000 feet and test casing above that depth. A radioactivity log would then be run through gas section to enable us to identify possible productive gas zones. The casing would then be perforated opposite the most permeable zones. Dual completion would be effected by setting a Baker Model "D" retainer production packer at approximately 3700 feet, and tubing run through the packer for production of the lower zone, or Grayburg-San Andres formation. The well is presently equipped for pumping, which would be changed to gas-lift to eliminate tubing vibration and possibly cause packer leakage.

We further propose that prior to the time the well is dually completed, to furnish the Commission, for its approval, a copy of the radioactivity log showing the location and extent of each separate stratum yielding production above the casing shoe and the vertical footage location of the proposed perforations; and further upon the actual dual completion of the well, we shall submit to the Commission a diagrammatic sketch of the mechanical installation which was used to complete and produce the seal between the producing formations, together with a special report of production, gas-oil ratio and reservoir pressure, determination of each producing zone immediately following completion, and further to comply with any order of the Commission which to the Commission seems necessary for the prevention of waste or protection of correlative rights.

If we are permitted to recomplete the well in the manner here proposed, it will save the use of approximately 77 tons of critical steel in addition to \$27,000-\$30,000 which is the estimated difference between drilling a new well and the proposed dual completion.