## BEFORE THE

## OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

## TRANSCRIPT OF HEARING

CASE NO. 405

SEPTEMBER 16, 1952



## BEFORE THE OIL CONSERVATION COMMISSION SANTA FE. NEW MEXICO

SEPTEMBER 16. 1952

In the Matter of:

Tide Water Associated Oil Company's application for permission to dually complete (gas-oil) its State "A" No. 4 well, Eunice Pool, NE NE 8-21S-35E.

Case No. 405

(Notice of Publication read by Mr. Graham.)

MR. HOLLOWAY: J. B. Holloway representing Tidewater Association.

This application for permission to dually complete our State "A" No. 4 well located in the center of NE/4 NE/4 of Section 8, Township 21 South, Range 36 East, Eunice Pool, Lea County, is identical in principle to similar applications made under Case Nos. 375 and 383.

Tide Water Associated Oil Company completed State "A" No. 4 well on April 16, 1935, which initially and presently is producing oil from the Grayburg-San Andres formation from open hole interval 3790 feet (the bottom of 7" casing) to total depth, 3887 feet. An intermediate string of 9-5/8" casing was set and cemented at 2842 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 a depth of approximately 3000 feet, which zones are now identified in this area as being the Yates-Seven Rivers formation.

It is our opinion that it is practical and economically feasible to dually complete State "A" No. 4 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 radiocativity log would then be run through the gas section to enable us to identify possibly 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 flowing but should artificial lift become necessary, we propose to equip the well with flow valves to eliminate tubing vibration which would 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, a 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.

This well is jointly owned by Tide Water, the operator,
Sun Ray Oil Corporation and the Warren Petroleum Corporation.
The two latter companies have approved this applicant's proposal and the method of re-completion of the well.

I believe that is all.

MR. SPURRIER: Anyone have a question of the witness?

MR. MACEY: Do you know whether there is another well producing from the same gas zone in that 160?

MR. HOLLOWAY: No, not in the gas. We have four oil wells and one gas well on the 160. We have made two prior applications, both being on 160-acre units, both have been granted.

We are taking the open flow positions of the oil on Petroleum

Number 3. The first well, the initial test showed the well would

produce between five and ten million feet; shut-in gas pressure

of 1197 pounds. I believe the field has already furnished the

Commission with a radio-active log and following the open flow

test and everything else, we propose to furnish a complete report.

MR. SPURRIER: Anyone have any further comment in the case? If not, the witness may be excused and the case will be taken under advisement. Next case is No. 406.

(Witness excused.)

STATE OF NEW MEXICO )
COUNTY OF BERNALILLO )

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 405 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on September 16, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

DATED at Albuquerque, New Mexico, this <u>23</u> day of September, 1952.

Marina Mice