BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF AMENDED APPLICATION OF TIDE WATER ASSOCIATED OIL COMPANY FOR AUTHORITY TO TRANSFER ALLOWABLE PRODUCTION OF ITS STATE "S" NO. 5 TO STATE "S" NO. 4 FOR ELLENBERGER PRODUCTION, AND THE ALLOWABLE OF A MCKEE SAND COMPLETION IN STATE "S" NO. 4 TO STATE "S" NO. 5 FOR MCKEE SAND PRODUCTION, BOTH OF SAID WELLS BEING LOCATED IN THE N/2 NW/4 SECTION 15, T-21-S, R-37-E, BRUNSON-HARE FIELDS, LEA COUNTY, NEW MEXICO, OR IN THE ALTERNATIVE FOR AUTHORITY TO DUALLY COMPLETE EACH WELL IN THE MCKEE AND ELLENBERGER FORMATIONS.

CASE NO. 260

Amended Application

Comes now Tide Water Associated Oil Company, a Delaware Corporation, with district office located at Hobbs, New Mexico, and acting upon authority granted by Order No. R-63, hereby files its amended application for authority to transfer the allowable production of its State "S" No. 5, located in the NW/4 NW/4 Section 15, T-21-S, R-37-E, to its State "S" No. 4, located in the NE/4 NW/4 Section 15, T-21-S, R-37-E, for Ellenberger production; and upon recompletion of State "S" No. 5 in the McKee sand to transfer the allowable of a McKee sand completion in State "S" No. 4 to State "S" No. 5; or in the alternative that it be granted authority to dually complete the two wells in each of the two aforementioned pools. In support of this application, applicant respectfully shows to the Commission as follows:

- 1. That the applicant is the owner of that certain oil and gas lease from the State of New Mexico bearing No. B-9188 embracing all of the N/2 N/2 of Section 15, and the SE/4 SE/4 Section 10, 21-S, 37-E.
- 2. That on January 19, 1951, applicant completed its State "S" No. 4 at a location 100 feet east of center of the NE/4 NW/4 Section 15, which well flowing through perforations opposite the Ellenberger formation from 7800 to 7825 feet produced 96.37 barrels of 42 gravity oil in 4 hours on 1/4" choke, with gas-oil ratio of 1131:1, tubing pressure 580 p.s.i.
- 3. That State "S" No. 4 penetrated the McKee sand in the Simpson zone, which sand had an overall thickness of approximately 150 feet. That a one hour drill stem test was made in the McKee sand from 7422 to 7534 feet, during which time the well produced 50 barrels of 45.8 gravity oil with pressure ranging from 470 to 970 p.s.i.
- 4. That on April 18, 1951, applicant was in the process of completing its State "S" No. 5 well at a location 990 feet east and 660 feet south of the northwest corner of NW/4 NW/4 Section 15, 21-8, 37-E. That State "S" No. 5 in initial tests for production in the Ellenberger, producing from the Ellenberger through casing perforations 7968-8020 and 8062-8120 feet flowed at the rate of 353 barrels per day of 38 gravity oil with gas-oil ratio of 740:1.

- 5. That in drilling State "S" No. 5 approximately 280 feet of McKee sand was penetrated, which on a drill stem test in the interval 7606 to 7700 feet flowed 62.22 barrels of 43.6 gravity oil in one hour, or at the rate of 1493 barrels a day, with gas-cil ratio of 611:1.
- 6. That the McKee sand in the Simpson zone and the Ellenberger lime are separate common sources of supply, separated by impermeable shale and lime, and in this area have been designated by the Commission as the Hare and Brunson pools, respectively.
- 7. That permission is hereby requested to transfer the allowable production between the two wells with the result that State "S" No. 4 may produce from the Ellenberger lime with an allowable commensurate to that of two 40-acre units producing from the Brunson pool and that permission be granted to plug back and recomplete State "S" No. 5 in the McKee sand and that it be given an allowable commensurate to that of two 40-acre units producing from the Hare pool.
- 8. That it has been proven that under certain conditions and circumstances, it is in the interest of conservation to transfer the allowable production from one well to another on the same lease, and applicant respectfully submits the proposition that having established the fact the State "S" No. 4 and State "S" No. 5 are each productive in both the McKee sand and Ellenberger lime that it would follow that the NE/4 NW/4 and the NW/4 NW/4 of Section 15, 21-S, 37-E, should be entitled to a proportionate share in the allowable production from the common source of supply in both instances.
- 9. That in the event the Commission is not disposed to grant applicant an allowable commensurate to that of two 40-acre units, as requested, then an alternative request is hereby made for authority to dually complete both State "S" No. 4 and State "S" No. 5.
- 10. That it has been frequently demonstrated that mechanical packers and other devices are available to effectively separate two productive zones in one well bore, in such manner that one zone is produced through the tubing and the other zone is produced through the annulus between the tubing and casing. That applicant would install such a packer in the interval between the base of the McKee sand and the top of the Ellenberger lime in each of said State "S" wells Nos. 4 and 5 and in such manner produce the Ellenberger lime through the tubing and produce the McKee sand through the annulus.
- ll. Applicant further alleges that in drilling these wells, approximately 125 tons of steel are required to properly case and equip each well. Steel is now in scarce supply and critically needed in our Country's defense preparations. Applicant believes and so represents to the Commission that either of the two means suggested to alleviate the further immediate need of steel would be equitable and fair in all respects, and will not in any manner disturb correlative rights or cause reservoir waste. That in so doing, it would enable applicant to make readily available the additional amount of oil which would accrue to a McKee sand well and an Ellenberger lime completion, all of which will be of benefit to our Country's defense efforts, to the State of New Mexico as royalty owner and to the applicant.

- 12. Your applicant respectfully suggests to the Commission that it take into consideration the state of emergency which now exists in our Government and the urgent demand now being made for the establishment of additional and immediate producible reserves of oil, with the minimum use of steel. To that end it is requested that this application be given favorable consideration.
- 13. That a plat is attached hereto marked Exhibit "A" showing the location of all wells on applicant's lease, and all offset wells and ownership of adjoining properties.

Respectfully submitted,

TIDE WATER ASSOCIATED OIL COMPANY

By

J. B. Holloway

April 20, 1951