BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 167
ORDER NO. 810

IN THE MATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER GRANTING PERMISSION TO DUALLY COMPLETE ITS "STATE LMT WELL #1", SW¼NW¼ OF SECTION 36, TOWNSHIP 23 SOUTH, RANGE 36 EAST, N.M.P.M., IN THE LANGLIE-MATTIX POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10:00 A. M. on December 7, 1948, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 26th day of January, 1949, the Commission having before it for consideration the testimony and other evidence adduced at the hearing of said cause together with the application of the petitioner and being fully advised in the premises;

FINDS:

1. That due public notice of hearing upon said application having been given fixing the date of said hearing as December 7, 1948, at Santa Fe, New Mexico, the Commission has jurisdiction of the case;

2. That in previous dual completion cases before the Commission, and in this case, there remains a question as to the absolute efficiency of packers and mechanical devices to absolutely prevent comingling of gas and fluid hydrocarbons from two or more different strata through a single well bore;

3. That the subject well sought to be dually produced is in the near vicinity of other wells being dually produced under the authority of Commission Orders Nos. 750 and 801 in the Langlie-Mattix pool, Lea County, New Mexico;

4. That the dual completion of this well will add to information previously gained as to the efficiency of mechanical packers in the prevention of comingling of gas and fluid hydrocarbons in two or more different producing horizons.

IT IS THEREFORE ORDERED that effective December 7, 1948, Amerada Petroleum Corporation be and it hereby is granted permission to dually complete and produce its State LMT No. 1 well, in the Langlie-Mattix pool, Lea County, New Mexico, in such manner that gas and/or fluid hydrocarbons may be produced through the tubing from the Queen formation (Stuart sand), the 3500 foot to 3607 foot zone and that gas well gas may be produced through the annular space between the casing and tubing from the Yates sand, that is, from the 2900 foot to 3400 foot zone, provided, however, that said State LMT No. 1 well shall be dually completed and produced in such a manner that there is absolutely no comingling within the bore of the well of gas well gas or fluid hydrocarbons produced from each of the separate productive stratum encountered therein.

In order to prevent comingling of gas well gas, gas or fluid hydrocarbons within said well bore the dual completion thereof shall be made substantially as follows: the well having been completed to the 3607 foot horizon

(Queen formati[illegible] through appropriate casing perf[illegible]tions at the proper depth; the upper zone [illegible]n like manner may be produced by casing perforations at the 2900 foot to 3400 foot zone (Yates-Seven Rivers) and each zone or formation carefully tested. Such tests and subsequent tests should be witnessed by an agent of the Commission and by representatives of any offset operation, if any there be. In event intercommunication between the zones behind the casing is indicated by formation tests corrective measures shall be applied and such tests continued and corrective measures applied until it is known that no intercommunication between the respective zones behind the casing exists. Should the test or tests establish the absence of intercommunication between the horizons outside of the casing, the Amerada Petroleum Corporation may proceed with the dual completion of said well as follows: a suitable packer of the type approved by applicant's consulting engineer, as indicated in applicant's petition, shall be so set as to effectively prevent migration of reservoir gas and fluid hydrocarbons from one horizon to the other inside the casing; the well shall be tubed through the packer; provided further, however, that it shall not be necessary for the petitioner to install a circulating choke above the packer if the upper horizon (Yates) sand reflects only gas production; however, should fluid hydrocarbons be encountered in the upper Yates-Seven Rivers formation, such corrective measures shall be undertaken as may be proper in the premises and as the conditions may require and provided further that any packer installed in said well between the separate horizons shall be properly tested for leakage at the time of the dual completion and shall be carefully retested at six month intervals thereafter. The original and all subsequent tests shall be witnessed by a representative of the Commission and by representatives of offset operations if any there be, and the results of each test properly attested to by the petitioner and all the witnesses and shall be filed with the Commission within ten days after the actual completion of each such test.

It is further provided that in event intercommunication between the zones is found or is suspected by any witness as the result of any test, the well shall be immediately shut in, the Commission notified and prompt and immediate action shall be taken by the petitioner to stop such intercommunication; following which a retest for leakage shall be made forthwith and witnessed aforesaid; provided further that intercommunication tests between the zones required by this order shall be made as follows: both zones shall be simultaneously closed in and kept closed a sufficient length of time to reach stabilization as determined by a dead weight tester. A recording depth pressure gauge shall then be run at the maximum depth possible; the zone (Yates-Seven Rivers) open to the annulus shall be produced at a maximum safe rate until stabilized flow conditions are obtained. In the event a significant decrease in pressure is shown by the recording pressure gauge, intercommunication shall be deemed to exist.

The Amerada Petroleum Corporation, the petitioner herein, shall submit in writing any changes in procedure in the actual completion of said well. Upon final completion of said dual completion of said well, the petitioner shall file with the Commission a report of the step by step procedure followed in producing each zone and an expository statement of the merits and/or demerits of the actual performance of equipment and mechanical devices used and employed to effect the separation of the productive horizons and the respective production from each zone.

It is further ordered that upon failure of the petitioner herein to comply with any provision or provisions of this order, that the authority granted hereunder shall immediately terminate.

It is further ordered that this case is held open on the docket for such order or orders as may seem necessary to the Commission, is not to be taken as being a precedent for dual completions except in the Langlie-Mattix pool.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Thomas J. Mabry

THOMAS J. MABRY, CHAIRMAN

Guy Shepard

GUY SHEPARD, MEMBER

R. R. Spurrier

R. R. SPURRIER, SECRETARY

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following public hearing to be held December 7, 1948, beginning at 10:00 o'clock A.M. on that day in the City of Santa Fe, New Mexico, in Senate Chambers.

STATE OF NEW MEXICO TO:

All named parties in the following cases, and notice to the public:

CASE 167

In the matter of the application of Amerada Petroleum Corporation for an order granting permission to dually complete their "State LMT Well #1", Langlie-Mattix pool SWNW Section 36, Township 23 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico on November 17, 1948.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

By R. R. Spurrier
R. R. SPURRIER, SECRETARY