July 20, 1950

Oil Conservation Commission
P. O. Box 1545
Hobbs, New Mexico

Gentlemen:

We enclose herewith, signed copy of Case No. 221, Order No. R-21, issued in connection with the hearing held in Santa Fe, New Mexico, on May 23, 1950.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw
encl.

July 20, 1950

Mr. L. L. Shafer
Continental Oil Company
Drawer CC
Hobbs, New Mexico

Dear Mr. Shafer:

We enclose herewith, signed copy of Case No. 221, Order No. R-21, issued in connection with the hearing held in Santa Fe, New Mexico, on May 23, 1950.

Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw

CONTINENTAL OIL COMPANY

Hobbs, New Mexico
January 30, 1951

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

As ordered in Case 221, Order No. R-21, dated July 13, 1950, in regard to the dual completion in the Drinkard and Tubb formations of Continental Oil Company's Mary E. Wantz No. 3-D, Drinkard Pool, Lea County, New Mexico, the following report is submitted:

1. The well was originally completed on January 8, 1948, in the Drinkard formation at a total depth of 6630'. The 7" production casing was set at 6627' and perforated opposite the Drinkard formation in the intervals: 6546' to 6553', 6558' to 6564', 6568' to 6573', and 6580' to 6584'. The initial flowing potential was 240 barrels oil per day, no water, through a 1" choke, and a gas-oil ratio of 1,908 cubic feet per barrel. The original bottom-hole pressure taken during May 1948, was recorded as 1,678 psi and the tubing and casing pressures were 400 psi and 50 psi respectively. A bottom-hole pressure measurement taken in June 1950, indicated a pressure of 1,510 psi. A gas-oil ratio test taken in April 1950, indicated a productivity of 37 barrels oil per day, no water, and 107.9 MCF gas for a gas-oil ratio of 2,910 cubic feet per barrel.

2. The well was dually completed in the Tubb and Drinkard

formations between the dates September 20, 1950, and September 27, 1950. The well was killed with oil and a Baker Model "D" production packer was set at 6525'. The oil above the packer was then displaced with mud and the casing was perforated opposite the Tubb formation with four jet shots per foot from 6120' to 6190'. Tubing was run, the mud displaced with oil, and the formation treated through the perforations with 1,000 gallons of 15% acid. At that time it flowed an estimated 3,000 MCF per day and the pack off between the formations was completed by setting the tubing, equipped with a Baker Multi-U tubing seal nipple, down on the packer. The Drinkard formation was then swabbed in. This mechanical set-up is shown on the attached sketch.

3. A back-pressure test was then taken on the Tubb formation with the following results: (chart attached)

Open flow potential (calculated)	5370 MCF/day
Deliverability at 1,000 psi	3100 MCF/day
Deliverability at 600 psi	4500 MCF/day
Deliverability at 150 psi	5300 MCF/day
Shut-in bottom-hole pressure	2162 psi

Tests on the Drinkard indicated no change in productivity and on January 4, 1950, a test showed a productivity of 30 barrels oil per day, 1.67 barrels water per day, and a gas-oil ratio of 3090 cubic feet per barrel. A bottom-hole pressure test of the Drinkard taken in November 1950, after the dual completion showed that the pressure had declined to 1050 psi. This decline in pressure and slight increase in gas-oil ratio is considered normal at this stage of depletion of a volumetrically controlled reservoir.

The data as presented above, and in particular the difference

of pressure between the formations, and the gas-oil ratio tests on the Drinkard formation are evidence that the Mary E. Wantz No. 3-D has been dually completed as an oil well in the Drinkard formation and a gas well in the Tubb formation in such a manner that there is no co-mingling within the well bore of the hydrocarbons from the two formations.

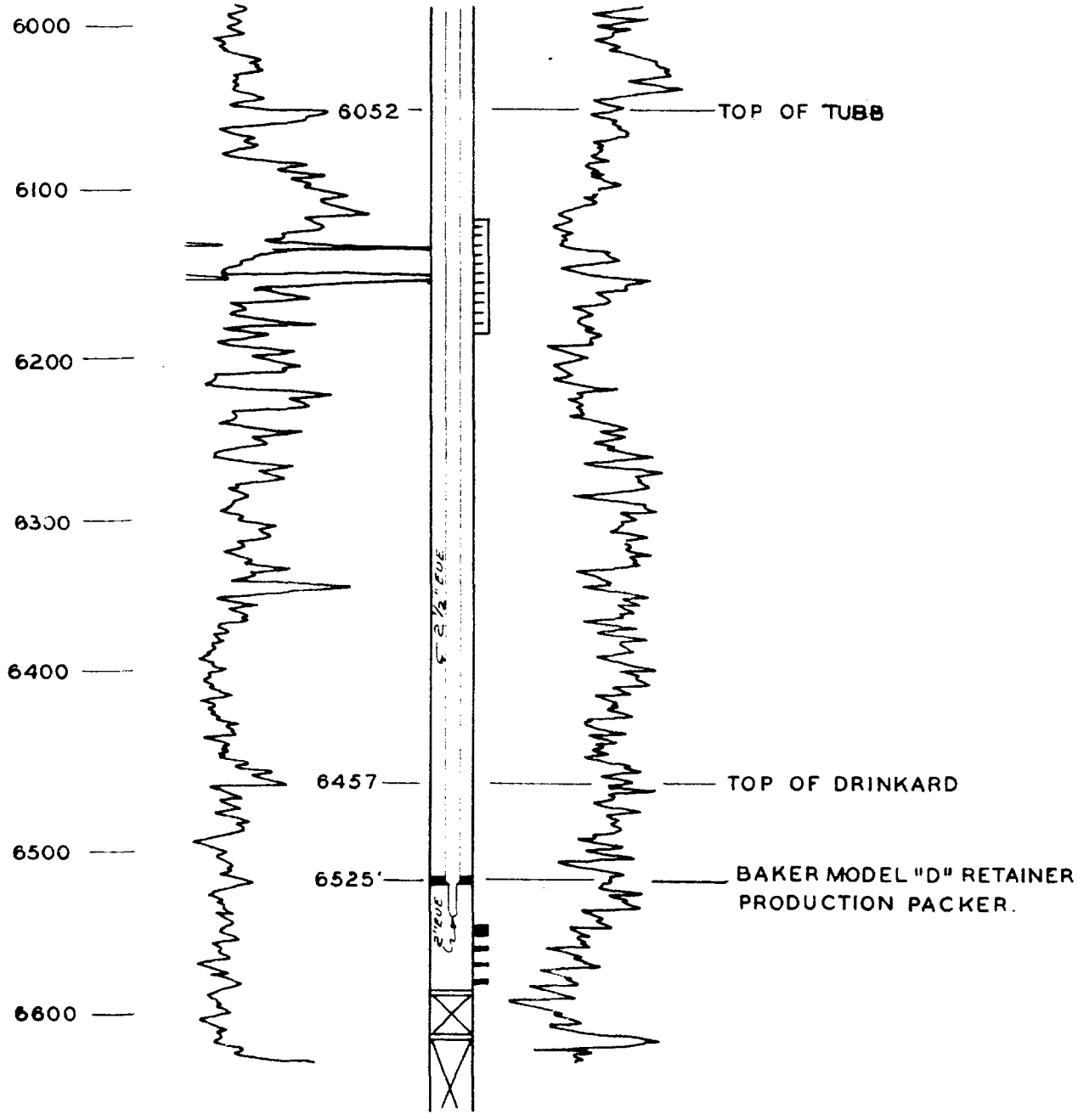
Yours very truly,

E. L. SHAFER
Supt., New Mexico District
West Texas-New Mexico Division
Production Department

ELS-MFM

CONTINENTAL OIL COMPANY
WANTZ NO. 3-D

ELEV.: 3458'



METHOD OF DUAL COMPLETION

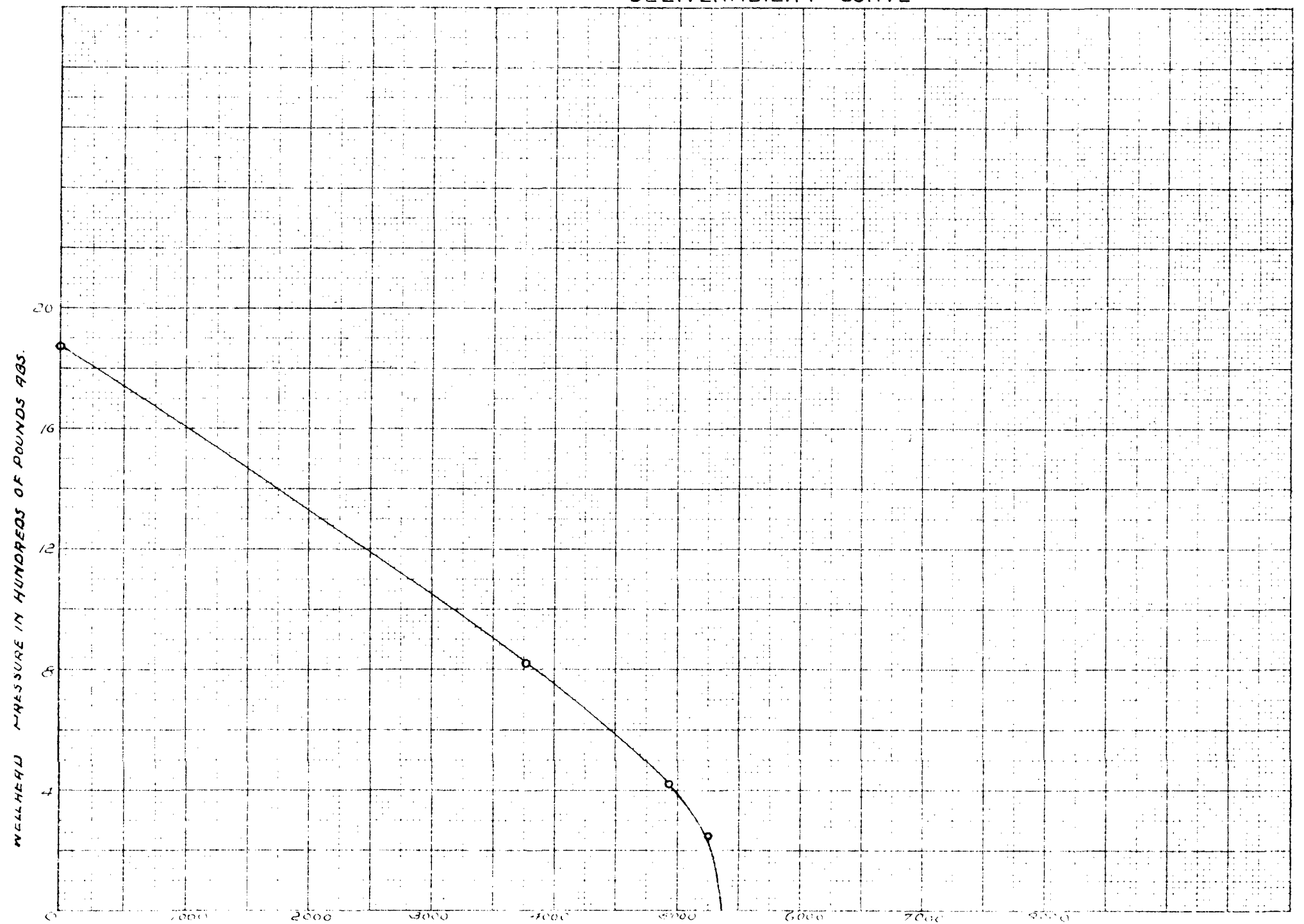
T.D. 6730' P.B. 6586'

PERFORATIONS NOW OPEN FOR OIL PRODUCTION IN DRINKARD: 6546-53', 6558-64', 6568-73' & 6530-84'.

PERFORATIONS NOW OPEN FOR GAS PRODUCTION IN TUBB SAND.: 6120-90'.

WANTZ NO. 3-D

DELIVERABILITY CURVE



WANTZ NO. 2

CALCULATED OPEN FLOW POTENTIAL