DUPLICATE

CONTINENTAL OIL COMPANY

Hobbs, New Mexico
October 2, 1950

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

Dear Sirs:

As ordered in Case No. 217, Order No. 28, dated July 28, 1950, the applicant, Continental Oil Company, submits the following report of operations conducted to effect a dual completion of the E. J. Wells B-1 No. 1, Cooper-Jal Pool, Lea County, New Mexico, as an oil-gas well in the Seven Rivers and Yates formations:

1. The Seven Rivers formation was perforated from 3522' to 3536' and these perforations were acidized with 500 and 1,000 gallons acid in two stages. This zone flowed 140 barrels oil and 14 barrels water in 24 hours through a 20/64" choke on 3" tubing with 289.3 MCF gas per day for a gas-oil ratio of 2,066 cubic feet per barrel. The tubing pressure was 490 psi and the casing pressure was 1,050 psi. The bottom-hole pressure at 3510' in the Seven Rivers zone is 1,036' psi as ascertained by an Amerada pressure bomb. A plat of the pressure survey is attached.

2. A Baker model "D" retainer production packer with tubing seal was set in the 7" casing at 3507'. A cross section of the packer is attached.

CONTINENTAL OIL COMPANY

Hobbs, New Mexico
October 2, 1950

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

Dear Sirs:

As ordered in Case No. 217, Order No. 58, dated July 28, 1950, the applicant, Continental Oil Company, submits the following report of operations conducted to effect a dual completion of the N. M. "ella L-L No. 1, Cooper-Jal Pool, Lea County, New Mexico, as an oil-gas well in the Seven Rivers and Yates formations:

1. The Seven Rivers formation was perforated from 3522' to 3536' and these perforations were acidized with 500 and 1,000 gallons acid in two stages. This zone flowed 140 barrels oil and 14 barrels water in 24 hours through a 20/64" choke on 3" tubing with 289.3 MCF gas per day for a gas-oil ratio of 2,066 cubic feet per barrel. The tubing pressure was 490 psi and the casing pressure was 1,050 psi. The bottom-hole pressure at 3510' in the Seven Rivers zone is 1,096 psi as ascertained by an Amerada pressure bomb. A plat of the pressure survey is attached.

2. A Baker model "D" retainer production packer with tubing seal was set in the 7" casing at 3507'. A cross section of the packer is attached.

3. The casing was then perforated opposite the Yates formation in the following intervals: 2910-2924', 2886-2896', 2866-2876', 2830-2850', and 2790-2822'. The 3" tubing was run with a side-door choke set above the packer and 2" tubing set through the packer to a total depth of 3510'. These perforations were then tested through the annulus and flowed at the rate of 550.3 MCF gas per day. The blank in the side-door choke was pulled to permit acidization of the Yates perforations with 500 gallons acid. The blank was then rerun in the side-door choke to blank-off the annulus and the oil productive Seven Rivers kicked off. A back-pressure test was taken of the Yates section which tested at the rate of 1,600 MCF gas per day after acidization with a shut-in pressure of 911.2 psi absolute. The calculated bottom-hole pressure at the bottom of the lowest perforations (2924') opposite the Yates formation is 985.2 psi absolute. A report of the back-pressure test is attached.

The data presented above and attached hereto is in evidence that the E. J. Wells B-1 No. 1 has been dually completed as an oil-gas well in the Seven Rivers and Yates formations in such a manner that there will be no co-mingling within the well bore of the hydrocarbons produced from the two separate reservoirs.

Yours truly,

E. L. Shafer

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

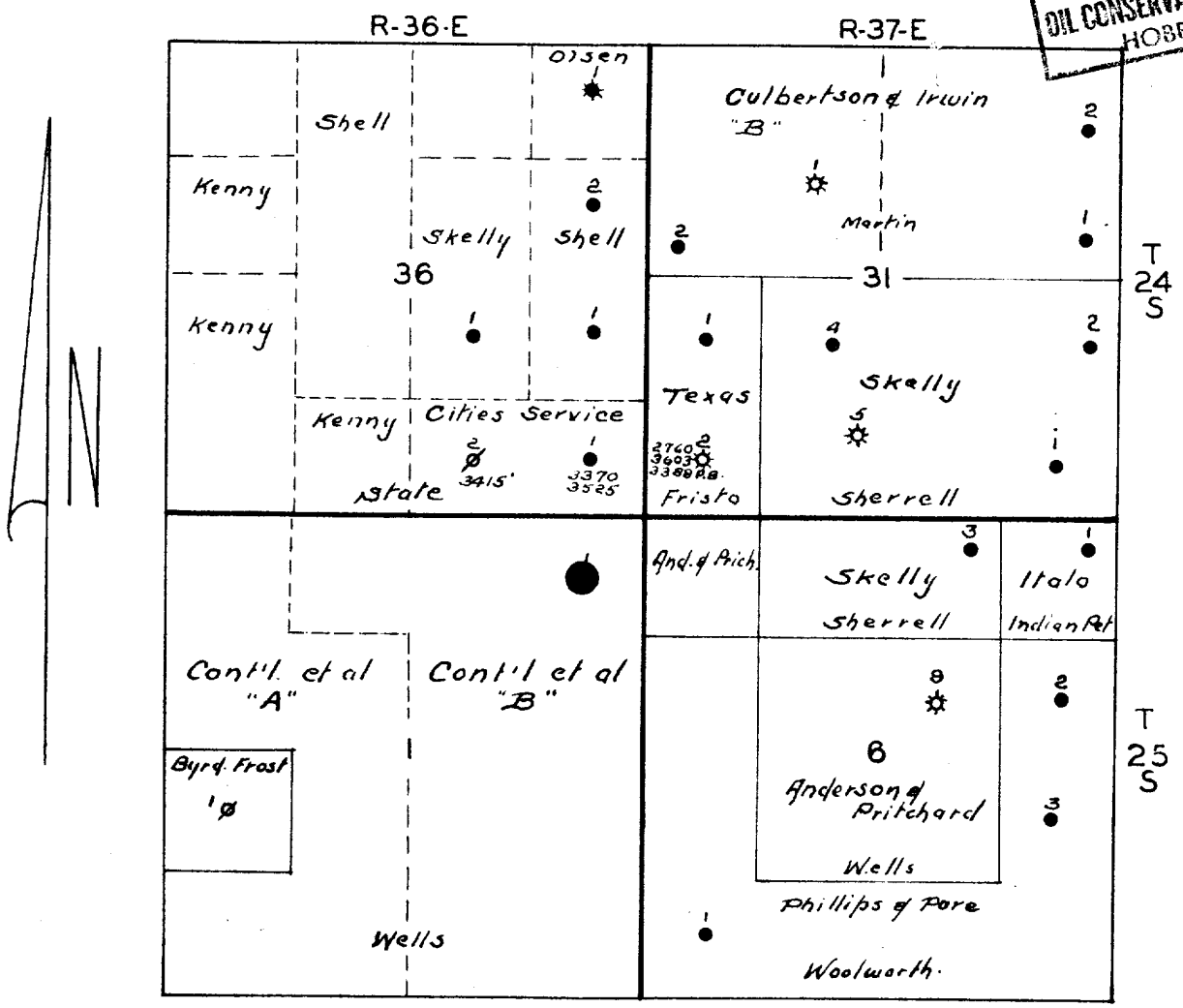
ELS-MFM

3. The casing was then perforated opposite the Yates formation in the following intervals: 2910-2924', 2966-2976', 2830-2850', and 2790-2822'. The 3" tubing was run with a side-door choke set above the packer and 2" tubing set through the packer to a total depth of 3510'. These perforations were then tested through the annulus and flowed at the rate of 550.3 MCF gas per day. The blank in the side-door choke was pulled to permit acidization of the Yates perforations with 500 gallons acid. The blank was then return in the side-door choke to blank-off the annulus and the oil productive Seven Rivers kicked off. A back-pressure test was taken of the Yates section which tested at the rate of 1,600 MCF gas per day after acidization with a shut-in pressure of 911.2 psi absolute. The calculated bottom-hole pressure at the bottom of the lowest perforations (2924') opposite the Yates formation is 985.2 psi absolute. A report of the back-pressure test is attached.

The data presented above and attached hereto is in evidence that the R. J. Wells B-1 No. 1 has been dually completed as an oil-gas well in the Seven Rivers and Yates formations in such a manner that there will be no co-mingling within the well bore of the hydrocarbons produced from the two separate reservoirs.

Yours truly,

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



CONTINENTAL OIL CO. ET. AL.
WELLS B-1 NO.1
AND
OFFSET WELLS

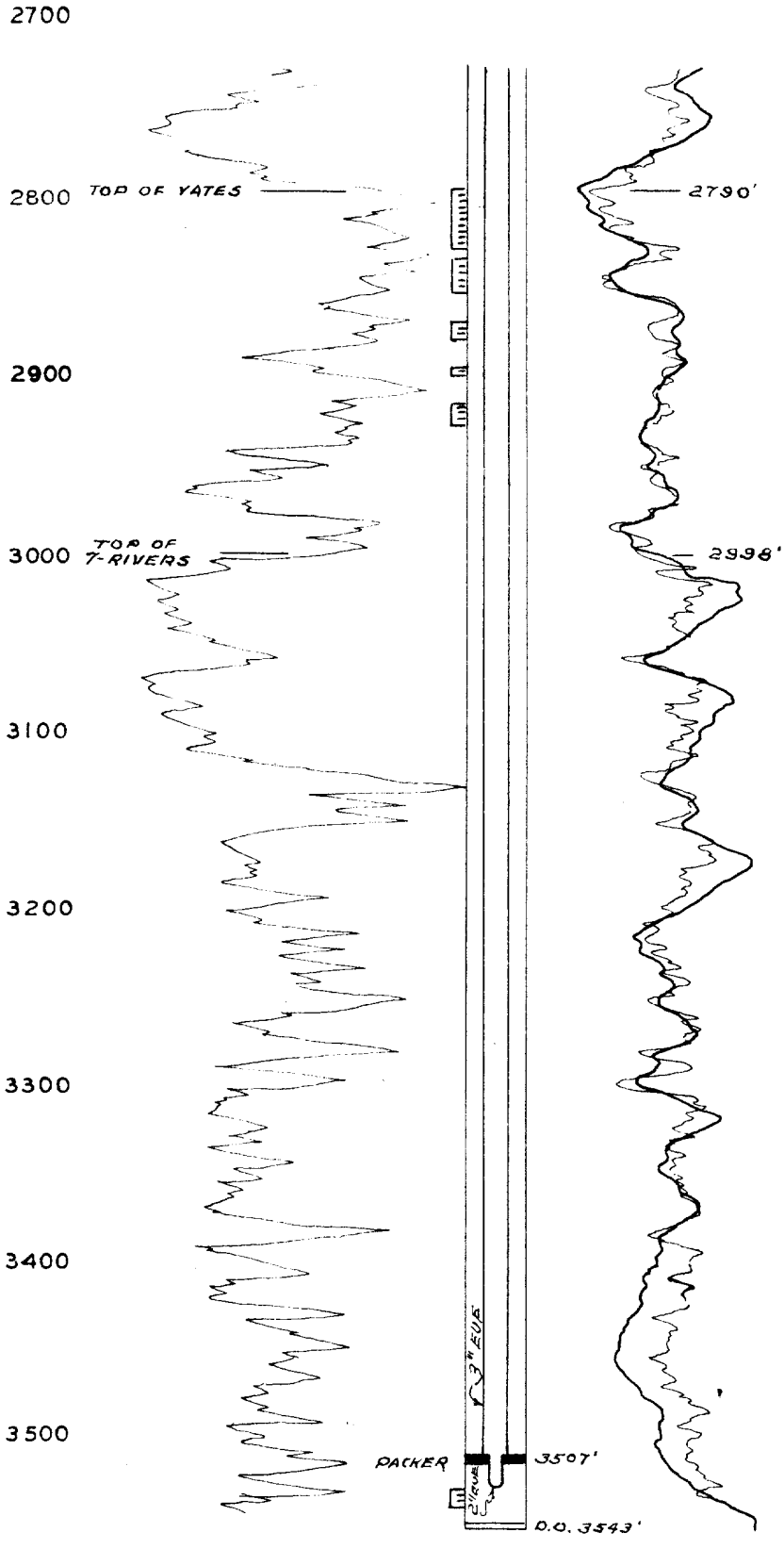
SCALE: 1 INCH=2000 FT.

N.M. DIST. OFFICE

MARCH 28..1950

CONTINENTAL OIL CO.
WELLS B-1 NO.1

ELEV: 3252'



Perforated csg. 3522-36' with 4 shots/ft. Swabbed dry. Acidized w/500 gals. Swabbed dry. Re-acidized w/1000 gals. Flowed 190 BO/15 hrs, thru 3/4" choke with GOR 414. T.P. 50#. C.P. 375#.

Set production packer @ 3507' and perforated:

2790 - 2822'
2830 - 2850'
2866 - 2876'
2891 - 2896'
2910 - 2924'

Flowed thru annulus 550.3 MCF gas per day, no fluid, on 2-hour test. Acidized with 500 gals. Flowed 649.4 MCF per day, no fluid, on 3-hr. test.

Pulled orifice & side-door choke. Reran blank. Completed for I.P. of 140 BO and 14 BW in 24 hours, flowing thru 20/64" choke on 3" tubing, with 289.3 MCF gas. GOR 2066. T.P. 490#. C.P. 1050#.

Dually completed as gas well for I.P. of 1600 MCF gas in 24 hrs based on 8-hr test. Shut-in BHP = 985.2 p.s.i. 4hrs.

F 12-286 PB

SUBSURFACE PRESSURE SURVEY

CONTINENTAL OIL COMPANY E. J. Well [illegible]-1

County Lea Field Cooper-Jal

State New Mexico Zone Seven Rivers

Elev., ft. 3252 Well No. 1

Depth, ft. 3544 Total [illegible] plug

Zone Open, ft. 3522 to 3536

to

to

to

Net Effective Pay, Est. [illegible]

Oil String 7 " [illegible] # @ 3544 ft.

Tubing 3 EUE" 9.3 # @ 3510 ft.

Tubing " # @ ft.

Shut In 26 Hr. Oil Gr. °API

Oil, Net b/d Water b/d

Total Gas M/d Net M/d

Trap Press, #/□"ga. High Low (°F)

Depth	Pressure	Temp.	Remarks
0	940 T		CP lb./sq. in.
1000	967		
2000	994		
2500	1009		
3000	1022		
3452	1034		
3510	1036		

Fluid Level ft. Gas Ave. Grad. #/□"/ft. .027

Date of Run 9-19-50 Start 10:00 : 10:30 Am

DEPTH — Thousands of feet

0 1 2 3 4

7 8 9 10

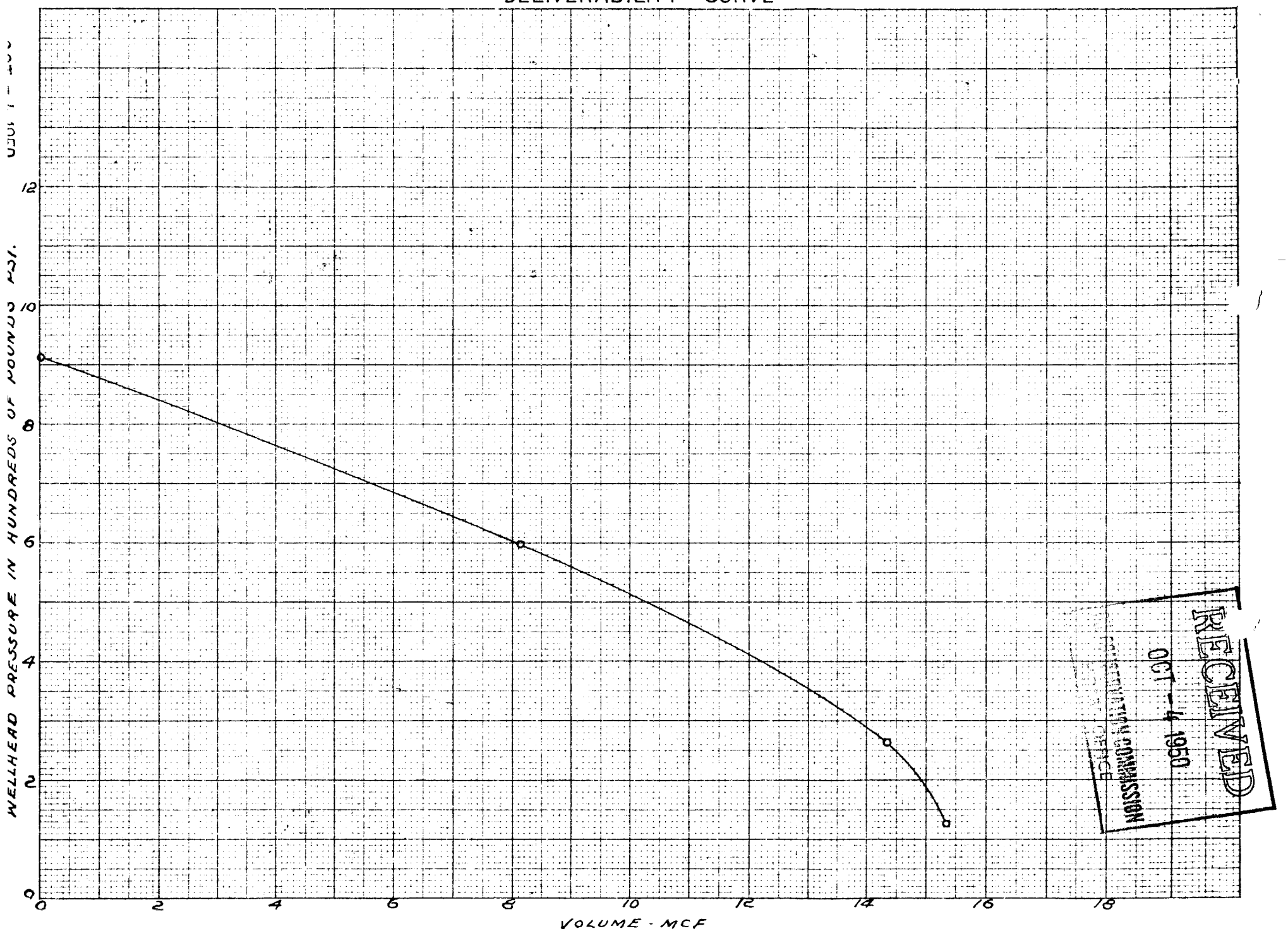
PRESSURE — Hundreds of lb./sq. in. ga.

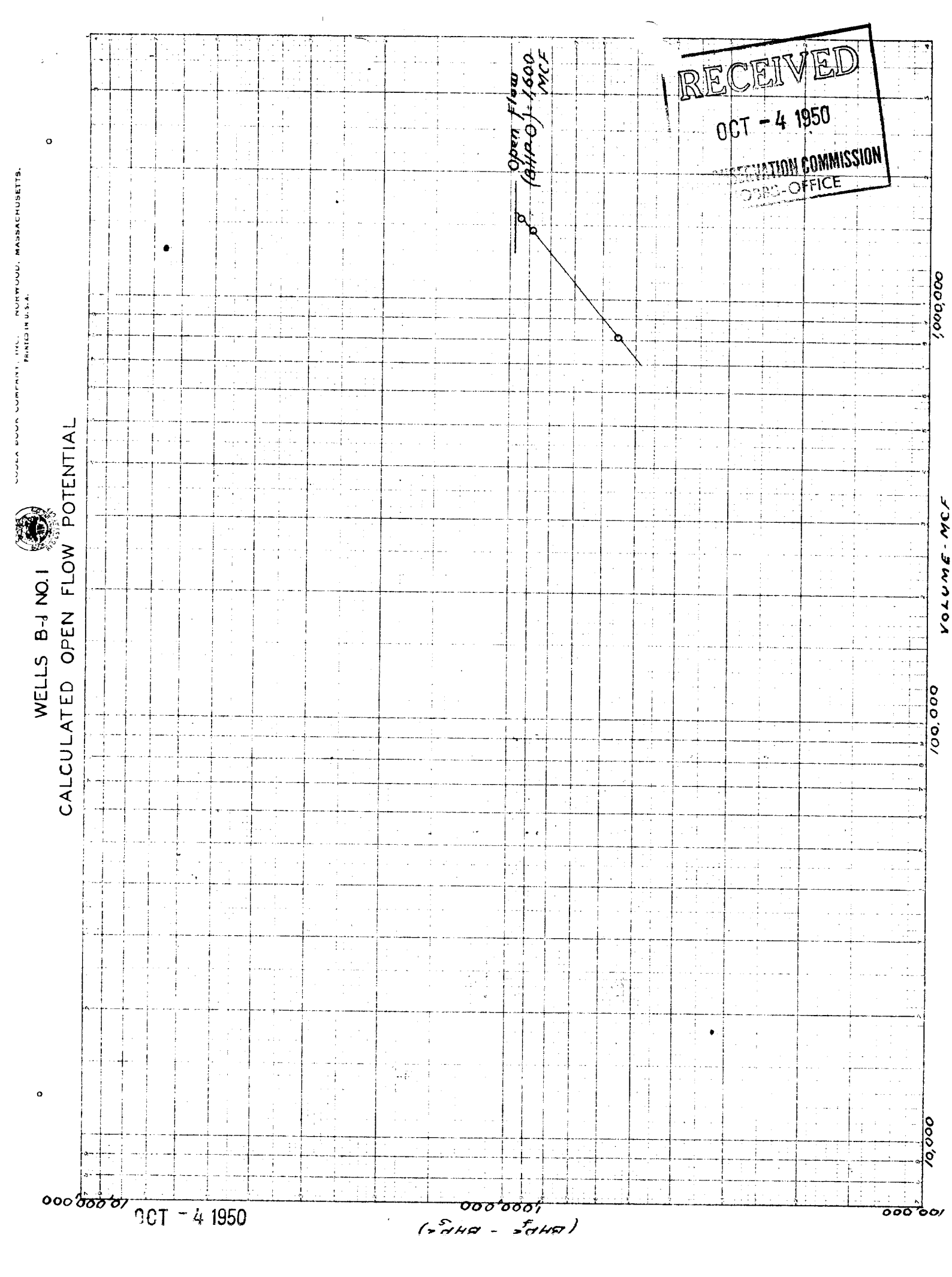
Date: 9-19-50

By: L. W. P.

OCT - 4 1950

WELLS B-1 NO. 1
DELIVERABILITY CURVE




RECEIVED
OCT - 4 1950
CONSERVATION COMMISSION
CORS-OFFICE
WELLS B-J NO.1
CALCULATED OPEN FLOW POTENTIAL
Open Flow (Aof) = 1600 MCF
VOLUME - MCF
1,000,000
100,000
10,000
OCT - 4 1950

CONTINENTAL OIL COMPANY
BACK-PRESSURE TEST DATA
WELLS B-1 NO. 1

Volume (Calculated MCF)	B.H.P. (Calculated PSI ABS)	$B.H.P.^2$	$(BHP^2_2 - BHP^2_1)$	Surface Press. (PSI ABS)
0	985.2	970,619.04	-	911.2
811.2	647.2	418,867.84	551,751.2	598.2
1,432.7	283.2	80,202.24	890,416.8	261.2
1,533.1	135.2	18,279.04	952,340.0	125.2

Note: Volumes corrected for specific gravity and atmospheric pressure.

Date Tested: September 8, 1950

CONTINENTAL OIL COMPANY
BACK-PRESSURE TEST DATA
WELLS B-1 NO. 1

Volume (Calculated MCF)	B.H.P. (Calculated PSI ABS)	$B.H.P.^2$	$(BHP_1^2 - BHP_2^2)$	Surface Press. (PSI ABS)
0	985.2	970,619.04	-	911.2
811.2	647.2	418,867.84	551,751.2	598.2
1,432.7	283.2	80,202.24	890,416.8	261.2
1,533.1	135.2	18,279.04	952,340.0	125.2

Note: Volumes corrected for specific
gravity and atmospheric pressure.

Date Tested: September 8, 1950