EXHIBIT NO 3
CASE 1349

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
Continental EXHIBIT No. 3
CASE 1349

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Eumont Formation Queen County Lea

Initial X Annual ___ Special ___ Date of Test 11-16-57

Company Continental Oil Company Lease State D-15 Well No. 8

Unit P Sec. 15 Twp. 21 Rge. 36 Purchaser EPNG to connect

Casing 5 1/2 Wt. 17 I.D. ___ Set at ___ Perf. 3494 To 3648

Tubing 2 Wt. 4.7 I.D. ___ Set at ___ Perf. ___ To ___

Gas Pay: From ___ To 3494 L 3648 xG .670 -GL 2341 Bar.Press. 13.2

Producing Thru: Casing X Tubing ___ Type Well Single
Single-Bradenhead-G. G. or G.O. Dual

Date of Completion: 11-16-57 Packer --- Reservoir Temp. ___

OBSERVED DATA

Tested Through ~~(Prover)~~ ~~(Choke)~~ (Meter) Type Taps Flange

No.	Flow Data ~~(Prover)~~ (Line) Size	~~(Choke)~~ (Orifice) Size	Press. psig	Diff. h_w	Temp. °F.	Tubing Data Press. psig	Tubing Data Temp. °F.	Casing Data Press. psig	Casing Data Temp. °F.	Duration of Flow Hr.
SI						1025		1025		36
1.	4	1.250	480	22	42	1013				2
2.	4	2.000	560	27	40	985				2
3.	4	2.000	600	69	50	956				2
4.	4	2.000	830	76	66	915				(6)
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F_t	Gravity Factor F_g	Compress. Factor F_{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	104.28	493.2	1.0178	.9463	1.038	1005
2.	25.580	124.40	573.2	1.0198	.9463	1.077	3307
3.	25.580	205.70	613.2	1.0098	.9463	1.079	5426
4.	25.580	253.14	843.2	.9943	.9463	1.098	6690
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio --- cf/bbl.
Gravity of Liquid Hydrocarbons --- deg.
F_c Not applicable $(1-e^{-s})$ Not applicable*

Specific Gravity Separator Gas ---
Specific Gravity Flowing Fluid ---
P_c 1038.2 P_c^2 1077.9

No.	P_w / P_t (psia)	P_t^2	F_cQ	$(F_cQ)^2$	$\frac{(F_cQ)^2}{(1-e^{-s})}$	P_w^2	$P_c^2-P_w^2$	Cal. P_w	$\frac{P_w}{P_c}$	
1.	1026.2	---	---	---	---	1053.1	24.8	1026.2	.99	**
2.	998.2	---	---	---	---	996.4	81.5	998.2	.96	**
3.	969.2	---	---	---	---	939.3	138.6	969.2	.93	
4.	928.2	---	---	---	---	861.6	216.3	928.2	.89	**
5.										

Absolute Potential: 41,000 MCFPD; n .99
COMPANY Continental Oil Company
ADDRESS Box 427, Hobbs, New Mexico
AGENT and TITLE Mr. W. D. Howard, Gas Tester
WITNESSED ___
COMPANY ___

REMARKS

* Pw measured
** On first data point well was tending to freeze off in choke.
On higher rates of flow drawdown & deliverability was limited by capacity of separator.

INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

NOMENCLATURE

Q = Actual rate of flow at end of flow period at W. H. working pressure (P_w). MCF/da. @ 15.025 psia and 60° F.

P_c = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater. psia

P_w = Static wellhead working pressure as determined at the end of flow period. (Casing if flowing thru tubing, tubing if flowing thru casing.) psia

P_t = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

P_f = Meter pressure, psia.

h_w = Differential meter pressure, inches water.

F_g = Gravity correction factor.

F_t = Flowing temperature correction factor.

F_{pv} = Supercompressability factor.

n = Slope of back pressure curve.

Note: If P_w cannot be taken because of manner of completion or condition of well, then P_w must be calculated by adding the pressure drop due to friction within the flow string to P_t.

COMPANY Continental Oil Company
WELL State D-15 No. 8
LOCATION P 15-21S-36E
COUNTY Lea
DATE 11-16-57