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NEW MEXICO OIL CONSERVATION COMMISSION
HOBBBS OFFICE

Form C-122
Revised 12-1-55

1963 JUL 10 AM 8:39
MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Bumont Formation Yates - Seven Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 6-14-63
Company Tidewater Oil Company Lease Coleman Well No. 3
Unit A Sec. 17 Twp. 21 Rge. 36 Purchaser El Paso Nat. Gas Co.
Casing 7" Wt. 24 I.D. _____ Set at 3789 Perf. _____ To _____
Tubing 2-1/2 Wt. 6.5 I.D. _____ Set at 3885 Perf. _____ To _____
Gas Pay: From 3125 To 3238 L 3125 xG .658 -GL 2056 Bar.Press. 13.2
Producing Thru: Casing X Tubing _____ Type Well G.O. Dual
Dual Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-10-52 Packer 7/ Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (Meter) Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								927		72
1.	4	1.250	539	4.41	58			887		24
2.	4	1.250	542	12.25	57			850		24
3.	4	1.250	551	29.16	60			802		24
4.	4	1.250	545	58.96	62			737		24
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	49.35		1.0019	.9549	1.061	483.1
2.	9.643	82.54		1.0029	.9549	1.061	808.7
3.	9.643	128.27		1.0060	.9549	1.062	1254
4.	9.643	181.32		.9981	.9549	1.059	1764
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c .865 (1-e^{-s}) .132
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 940.2 P_c² 884.0

No.	P _y P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.	900.2	810.4	.4179	.1746	.023	810.4	73.6	900.2	1.57
2.	863.2	745.1	.6995	.4893	.064	745.1	138.9	863.2	1.65
3.	815.2	664.5	1.085	1.177	.155	664.6	219.4	815.2	1.72
4.	750.2	562.8	1.826	2.329	.307	562.1	320.9	750.2	1.77
5.									

Absolute Potential: 4350 MCFPD; n .879

COMPANY Tidewater Oil Company
ADDRESS Box 249, Hobbs, N. Mex.
AGENT and TITLE B. M. Brining, Area Engineer
WITNESSED L. D. Southern
COMPANY El Paso Natural Gas Co.

REMARKS

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 .