

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MAIN OFFICE OCC

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat 1958 JUL 18 PM 1:24 Formation Yates - Rivers County LeaInitial \_\_\_\_\_ Annual \_\_\_\_\_ Special x Date of Test 6-30 - 7-4-58Company Dalport Oil Corporation Lease Christmas B Well No. 1Unit J Sec. 21 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas CompanyCasing 5 1/2 " Wt. 15.5 I.D. \_\_\_\_\_ Set at 3110 Perf. \_\_\_\_\_ To \_\_\_\_\_Tubing 2 3/8 Wt. 4.7 I.D. \_\_\_\_\_ Set at 3267 Perf. \_\_\_\_\_ To \_\_\_\_\_Gas Pay: From 3190 To 3173 L 3267 xG 667 -GL 2179 Bar.Press. 13.2Producing Thru: Casing \_\_\_\_\_ Tubing x Type Well SingleDate of Completion: Rework 6/58 Packer None Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp. \_\_\_\_\_

## OBSERVED DATA

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

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						637		604		72
1.	4	1.000	550	4.00	82	632		601		24
2.	4	1.000	526	9.00	78	630		600		24
3.	4	1.000	553	15.21	77	625		637		24
4.	4	1.000	529	43.56	74	608		624		24
5.										

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	6.135	47.46		.9795	.9485	1.053	284
2.	6.135	69.65		.9831	.9485	1.053	419
3.	6.135	92.78		.9840	.9485	1.056	561
4.	6.135	153.65		.9868	.9485	1.054	931
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> Measured (1-e<sup>-s</sup>)Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 657.2 P<sub>c</sub> 431.9

No.	P <sub>w</sub> P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.	645.2	416.3				428.0	3.9		
2.	643.2	413.7	Measured			426.7	5.2		
3.	638.2	407.3				422.8	9.1		
4.	621.2	385.9				406.0	25.9		
5.									

Absolute Potential: 3800 MCFPD; n .499COMPANY Dalport Oil CorporationADDRESS 930 Fidelity Union Life Bldg., Dallas, TexasAGENT and TITLE Sam M. Lampert, geologistWITNESSED J. R. FlumerCOMPANY El Paso Natural Gas Company, El Paso, Texas

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.

$F_{pv}$  = Supercompressibility 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  $P_t$ .