

## NEW MEXICO OIL CONSERVATION COMMISSION

CORRECTED REPORT

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Export Formation Queen County Lea  
Initial Annual Special X Date of Test 8-13 to 8-17-56  
Company Dalport Oil Corporation Lease McQuatters Well No. 1  
Unit R Sec. 12 Twp. 21-S Rge. 36-E Purchaser El Paso Natural Gas Company  
Casing 5 1/2 Wt. 14 I.D. Set at 3391 Perf. To  
Tubing 2 3/8 Wt. 4.70 I.D. Set at 3598 Perf. To  
Gas Pay: From 3397 To 3608 L 3598 xG .675 -GL Bar.Press. 13.2  
Producing Thru: Casing Tubing X Type Well Single  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 12-7-54 Packer None Reservoir Temp.

## OBSERVED DATA

Tested Through (Prover) (Choke) (Meter)

Type Taps 

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						870		877		72
1.	1	1.500	197	8.22	52	705		740		24
2.	1	1.500	250	8.22	60	639		681		24
3.	1	1.500	181	4.32	64	740		753		24
4.	1	1.500	170	2.02	75	790		797		24
5.										

## FLOW CALCULATIONS

No.	Coefficient F <sub>lg</sub> (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.	13.99	118.83		1.0078	.9427	1.022	1.614
2.	13.99	132.98		1.000	.9427	1.028	1.802
3.	13.99	59.89		.9962	.9427	1.019	802
4.	13.99	27.06		.9859	.9427	1.017	359
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.Gravity of Liquid Hydrocarbons  deg.F<sub>c</sub> (1-e<sup>-s</sup>)Specific Gravity Separator Gas Specific Gravity Flowing Fluid P<sub>c</sub> 890.2 P<sub>c</sub> 792.5

No.	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.	718.2	515.8				567.3	225.2	753.2	.8461
2.	652.2	425.4				481.9	310.6	694.2	.7798
3.	753.2	567.3		Measured		587.1	205.4	766.2	.8607
4.	803.2	645.1				656.4	136.1	810.2	.9101
5.									

Absolute Potential: 4,600 MCFPD; n 1.000COMPANY DALPORT OIL CORPORATIONADDRESS 930 Midway Union Life Bldg. Dallas, TexasAGENT and TITLE W. A. Smith Production ManagerWITNESSED Smith & BlumerCOMPANY El Paso Natural Gas Co

REMARKS

ELVIS A. UTZ  
GAS ENGINEER

## 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  $P_c$ .