

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates & 7 Rivers County Lea  
Initial \_\_\_\_\_ Annual \_\_\_\_\_ Special X Date of Test 12/13/57  
Company Dalport Oil Corporation Lease Lunt Well No. # 1  
Unit P Sec. 20 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Co  
Casing 5 1/2 Wt. 15.5 I.D. \_\_\_\_\_ Set at 3143 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Tubing 2 3/8 Wt. 4.7 I.D. \_\_\_\_\_ Set at 3030 Perf. \_\_\_\_\_ To \_\_\_\_\_  
Gas Pay: From 3170 To 3390 L 3030 xG .680 -GL 2060 Bar.Press. 13.2  
Producing Thru: Casing \_\_\_\_\_ Tubing X Type Well \_\_\_\_\_  
Date of Completion: 10-13-53 Packer None Reservoir Temp. \_\_\_\_\_  
Single-Bradenhead-G. G. or G.O. Dual

## OBSERVED DATA

Tested Through (Reservoir) (Shoek) (Meter) Type Taps Flange

No.	Flow Data				Tubing Data		Casing Data		Duration of Flow Hr.
	(PROVER) (Line) Size	(SHOKE) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.
SI									
1.	4	0.750	374	7.29	60	725			72
2.						374			24
3.									
4.	Unable to secure 4 point test on this well. Average Jalmat slope of .771 drawn								
5.	through one point.								

## FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	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.	3.435	53.11		1.0000	.9393	1.000	179
2.							
3.							
4.							
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> 9.936 (1-e<sup>-s</sup>) .132  
Specific Gravity Separator Gas .680  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 738.2 P<sub>c</sub><sup>2</sup> 544.9

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.	387.2	149.9	2.779	3.165	.418	150.3	394.6		
2.									
3.									
4.									
5.									

Absolute Potential: 233 MCFPD; n .774

COMPANY Dalport Oil Corporation  
ADDRESS 938 Fidelity Union Life Bldg  
AGENT and TITLE W. J. Smith President  
WITNESSED Earl G. Smith  
COMPANY El Paso Natural Gas Company

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  $P_t$ .

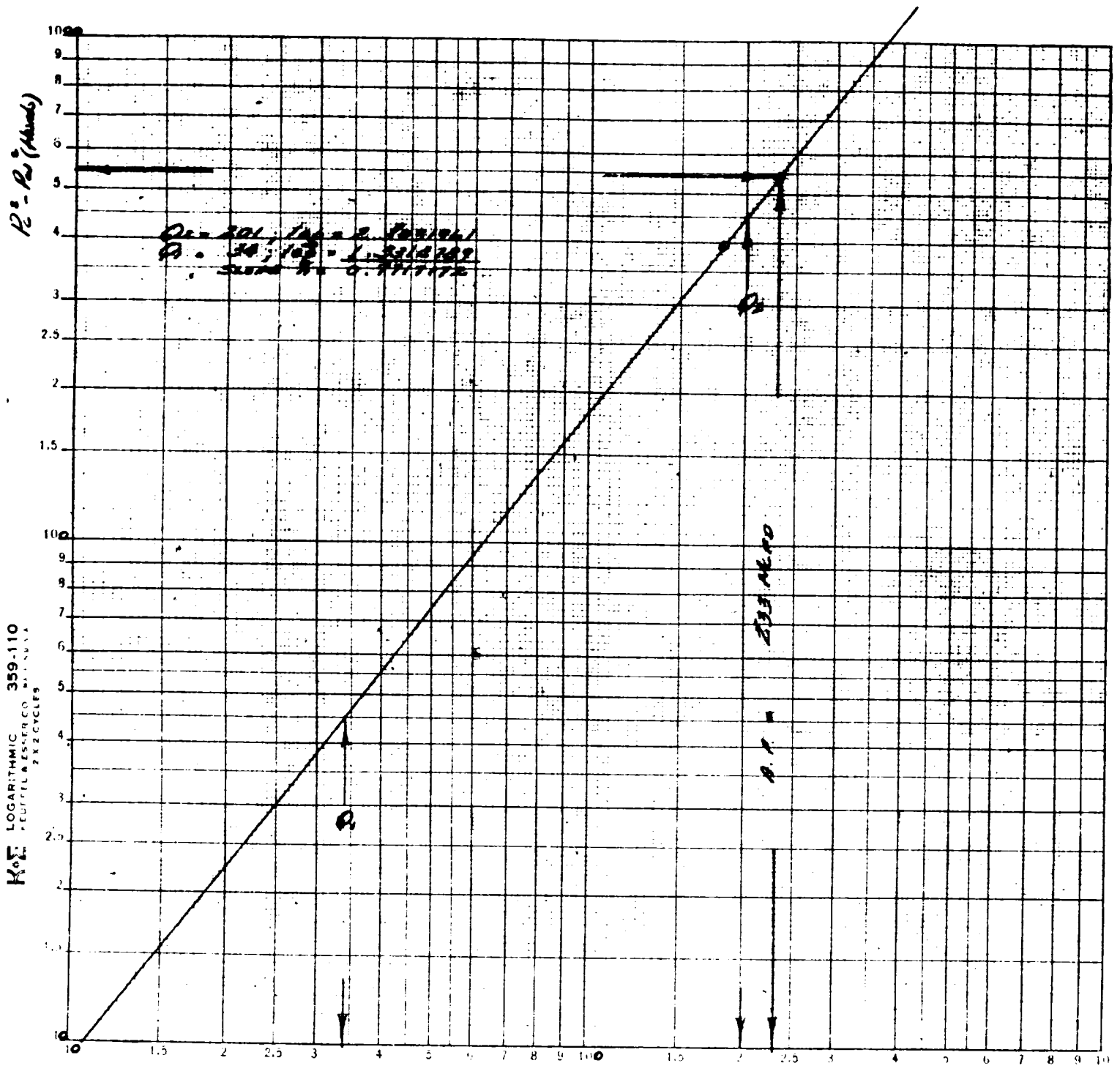
VALPORT OIL CORP.

LUNT # 1

P-20-22-36, LEA CO. N.M.

12-3-1957

A.P. = 233 MM



$P \cdot MFL - L. 0.15 \text{ DIA } @ 60^\circ$