

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MURKIN-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalnet Formation Yates - Seven Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 6-15/6-19-64
Company Dalport Oil Corporation Lease Christmas "B" Well No. 1
Unit J Sec. 21 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Company
Casing 5 1/2" Wt. 15.5 I.D. _____ Set at 3140 Perf. _____ To _____
Tubing 2 3/8" Wt. 4.7 I.D. _____ Set at 3268 Perf. _____ To _____
Gas Pay: From 3190 To 3473 L 3268 xG .678 -GL 2216 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Date of Completion: June 1958 Packer None Single-Bradenhead-G. G. or G.O. Dual
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 _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI				9.61		473		473		72
1.	4	1.750	168	9.61	62	459		468		24
2.	4	1.750	196	25.00	66	435		463		24
3.	4	1.750	174	44.22	62	422		460		24
4.	4	1.750	182	53.29	62	413		458		24
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_{wp}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	19.27	41.73		.9981	.9407	1.018	768.6
2.	19.27	72.32		.9943	.9407	1.020	1,330
3.	19.27	90.98		.9981	.9407	1.019	1,677
4.	19.27	101.99		.9981	.9407	1.020	1,882
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry cf/bbl.
Gravity of Liquid Hydrocarbons None deg.
P_c Measured (1-e^{-s}) - - - -

Specific Gravity Separator Gas None
Specific Gravity Flowing Fluid .678
P_c 486.2 P_c 236.4

No.	P _w (psia)	F _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.	472.2	223.0	- - -	Measured	- - - -	231.5	4.9		
2.	448.2	200.9	- - -	Measured	- - - -	226.8	9.6		
3.	435.2	189.4	- - -	Measured	- - - -	223.9	12.5		
4.	426.2	181.6	- - -	Measured	- - - -	222.0	14.4		
5.									

Absolute Potential: 20,050MCFPD; n 49COMPANY Dalport Oil CorporationADDRESS 930 Fidelity Union Life Bldg. Dallas, TexasAGENT and TITLE J. E. Murray GeologistWITNESSED J. E. MurrayCOMPANY 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 .