

NEW MEXICO OIL CONSERVATION COMMISSION
HOBBS OFFICE 600

1957 FEB 11 AM 10:03
MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 12-1-55

Pool Jalant Formation Yates & 7 Rivers County Lea
Initial _____ Annual _____ Special X Date of Test 11-12 to 11-16-56
Company Dalport Oil Corporation Lease W. H. King Well No. 1
Unit M Sec. 6 Twp. 23-S Rge. 37-E Purchaser El Paso Natural Gas Co
Casing 5 1/2 Wt. 24 I.D. 5.012 Set at 2847 Perf. _____ To _____
Tubing 2 Wt. 4.70 I.D. 1.995 Set at 3209 Perf. _____ To _____
Gas Pay: From 3038 To 3450 L 3209 xG .675 -GL 2166 Bar.Press. 13.2
Producing Thru: Casing _____ Tubing X Type Well Single
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 10-30-49 Packer None 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 _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI						*		875		72
1.	4	1.500	824	16.00	89			846		24
2.	4	1.500	790	29.16	86			837		24
3.	4	1.500	753	40.96	82			828		24
4.	4	1.500	705	60.84	79			819		24
5.										

*Unable to get tubing pressures - Valve stem broken

FLOW CALCULATIONS

No.	Coefficient F _{lg} (24-Hour)	$\sqrt{h_{wpf}}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	13.99	115.72		.9732	.9427	1.081	1.606
2.	13.99	153.02		.9759	.9427	1.079	2.125
3.	13.99	177.13		.9795	.9427	1.077	2.464
4.	13.99	209.01		.9822	.9427	1.072	2.902
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.936 (1-e^{-s}) 0.138
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 888.2 P_c² 788.9

No.	P _w 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.	859.2					738.2	50.7		81.3
2.	850.2					722.8	66.1		82.6
3.	841.2					707.6	81.3		80.9
4.	832.2					692.6	96.3		79.2
5.									

Absolute Potential: 20,250 MCFPD; n .93
COMPANY Dalport Oil Corporation
ADDRESS 930 Fidelity Union Life Bldg. Dallas, Texas
AGENT and TITLE W. L. Littlefield Vice-President
WITNESSED Jack Littlefield
COMPANY El Paso Natural Gas Company

REMARKS

1-1-57
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} = 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 .