

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Basin Dakota Formation Dakota County Rio Arriba
Initial * Annual _____ Special _____ Date of Test 9-23-64
Company Caulkins Oil Company Lease Breech "B" Well No. PD-123
Unit B Sec. 7 Twp. 26 N Rge. 6 W Purchaser Southern Union Gas Company
Casing 7" Wt. 23 & 26 I.D. 6.276 Set at 6845 Perf. 7284 To 7504
Tubing 2-3/8" Wt. 4.7 I.D. 1.995 Set at 7280 Perf. 7280 To _____
Gas Pay: From 8284 To 7504 L 7280 xG .700 xGL 5096 Bar. Press. 12
Producing Thru: Casing no Tubing yes Type Well Gas/Cas Dual
Single-Bradenhead-G. G. or G.O. Dual
Date of Completion: 9-15-64 Packer 6385 Reservoir Temp. 180

OBSERVED DATA

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

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.	
SI								
1.		<u>3/4"</u>				<u>2490</u>		<u>Shut in 184 hrs</u>
2.						<u>504</u>	<u>84</u>	<u>3 hours</u>
3.								
4.								
5.								

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.	<u>14.1605</u>		<u>516</u>	<u>.9777</u>	<u>.9252</u>	<u>1.058</u>	<u>6998</u>
2.							
3.							
4.							
5.							

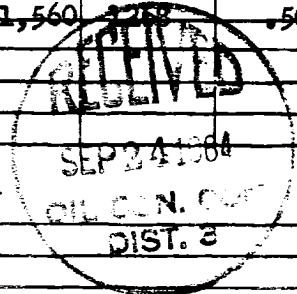
PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio _____ cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c 9.402 (1-e^{-S}) 0.310
Specific Gravity Separator Gas _____
Specific Gravity Flowing Fluid _____
P_c 2502 P_c² 6,260,004

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.	<u>516</u>	<u>266,256</u>	<u>65.80</u>	<u>4329.64</u>	<u>1,342,188</u>	<u>1,608,444</u>	<u>4,651,560</u>	<u>2282</u>	<u>.506</u>
2.									
3.									
4.									
5.									

Absolute Potential: 8764 MCFPD; n (1.35)ⁿ = 1.2524

COMPANY Caulkins Oil Company
ADDRESS Box 700, Farmington, New Mexico
AGENT and TITLE Superintendent
WITNESSED _____
COMPANY _____



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_t .