

NEW MEXICO OIL CONSERVATION COMMISSION

HOBBS OFFICE GOC

Form C-122

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Revised 12-1-55

Pool Blinberry Gas Formation Blinberry County LeaInitial X Annual _____ Special _____ Date of Test _____Company Sunray Mid-Continent Oil Co Lease Eva Owen Well No. 5Unit 6 C Sec. 8 Twp. 22 Rge. 37 Purchaser NoneCasing 8 1/2 Wt. 14 I.D. 5012 Set at 6577 Perf. 5493 To 5550Tubing 2 3/8 Wt. _____ I.D. 2" Set at 6346 Perf. _____ To _____

Gas Pay: From _____ To _____ L _____ xG _____ -GL _____ Bar.Press. _____

Producing Thru: Casing X Tubing _____ Type Well DualDate of Completion: 1-17-66 Packer _____ Single-Bradenhead-G. G. or G.O. Dual Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Choke) (~~Master~~) Type Taps _____

Flow Data						Tubing Data		Casing Data		Duration of Flow Hr.
No.	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>1612</u>					<u>Dual</u>				
1.	<u>2"</u>	<u>1/2</u>	<u>185</u>		<u>62</u>			<u>330</u>	<u>62</u>	<u>24</u>
2.	<u>2"</u>									
3.	<u>2"</u>	<u>1/2</u>	<u>937</u>		<u>86</u>			<u>937</u>	<u>86</u>	<u>9</u>
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.							
2.	<u>5.523</u>		<u>330</u>	<u>.9981</u>	<u>.9325</u>	<u>1.023</u>	<u>1735.3</u>
3.							
4.	<u>.5418</u>		<u>937</u>	<u>1.039</u>	<u>.9325</u>	<u>1.121</u>	<u>347.8</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio 40.439 cf/bbl.Gravity of Liquid Hydrocarbons 43.8 deg.F_c _____ (1-e^{-s})Specific Gravity Separator Gas 693

Specific Gravity Flowing Fluid _____

P_c _____ P_c² _____2601.7

No.	P _t 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.									
2.	<u>330</u>	<u>108.9</u>				<u>2601.7</u>	<u>2492.8</u>		
3.									
4.	<u>937</u>	<u>877.9</u>				<u>2601.7</u>	<u>1723.8</u>		
5.									

Absolute Potential: 2375 MCFPD; n _____COMPANY Sunray Mid-Continent Oil CompanyADDRESS Hobbs, New MexicoAGENT and TITLE Charles Beal, AgentWITNESSED Mr. GlassCOMPANY Sunray Mid-Continent Oil Company

REMARKS

Oil makes liquid on any stabilized rate
w completion

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 .