

3-BUCC  
1-BWP  
1-Occidental  
1-File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool South Blanco Formation Pictured Cliffs County San Juan  
Initial X Annual \_\_\_\_\_ Special \_\_\_\_\_ Date of Test 7-20-61  
Company Occidental Petroleum Corp. Lease W Well No. 3-6  
Unit \_\_\_\_\_ Sec. 6 Twp. 26N Rge. 5W Purchaser \_\_\_\_\_  
Casing 2-7/8" Wt. 6.5 I.D. \_\_\_\_\_ Set at 3490 Perf. 3264 To 3306  
Tubing - Wt. \_\_\_\_\_ I.D. \_\_\_\_\_ Set at \_\_\_\_\_ Perf. - To -  
Gas Pay: From 3264 To 3336 L 3336 xG .650 -GL 2168 Bar.Press. \_\_\_\_\_  
Producing Thru: Casing X Tubing \_\_\_\_\_ Type Well Single-Case  
Single-Bradenhead-G. G. or G.O. Dual  
Date of Completion: 7-13-61 Packer \_\_\_\_\_ Reservoir Temp. \_\_\_\_\_

OBSERVED DATA

Tested Through (2000000) (Choke) (2000000) Type Taps \_\_\_\_\_

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI								1092		
1.										
2.										
3.	2"	1/4"	217		62					3 hours
4.										
5.										

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.							
2.							
3.	12.3650		229	0.9981	0.9608	1.023	2776
4.							
5.							

PRESSURE CALCULATIONS

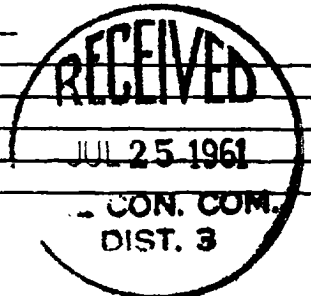
Gas Liquid Hydrocarbon Ratio \_\_\_\_\_ cf/bbl.  
Gravity of Liquid Hydrocarbons \_\_\_\_\_ deg.  
F<sub>c</sub> 9.951 (1-e<sup>-s</sup>) 0.146  
Specific Gravity Separator Gas \_\_\_\_\_  
Specific Gravity Flowing Fluid \_\_\_\_\_  
P<sub>c</sub> 1104 P<sub>c</sub> 1219

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.									
2.									
3.	229	52.4	15.4	237.8	34.7	87	1132		1.9768
4.									
5.									

Absolute Potential: 2958 MCFPD; n .85 1.065

COMPANY Occidental Petroleum Corp.  
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AGENT and TITLE T. A. Dugan, Engineer  
WITNESSED \_\_\_\_\_  
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.
- $F_{pv}$  = 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  $P_t$ .