NE EXICO OIL CONSERVATION COMMISS I

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 10-7-68	
Company: Phillips Petroleum Company		Connection: Shut in pending connection			
Pool: Undesignated-Wolfcamp		Formation: Wolfcamp		Unit: North Wilson Deep Unit	
Completion Date: 9-20-68	Total Depth: 11605	Plug Back TD: 10870	Elevation:	Farm or Lease Name: Wilson "J"	
Csg. Size: 5-1/2" / Wt.: 17#,20# / d: / Set At: 11605		Perforations: From 10396 To 10406		Well No.: 1	
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 10429		Perforations: From To		Unit: O / Sec.: 5 / Twp.: 21S / Rge.: 35E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple		Packer Set At: 10366		County: Lea	
Producing Thru: Tubing	Reservoir Temp. °F: 162 @ 11600	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 10429	H: 10429	Gg: .710	% CO_2: 0	% N_2: 1.40	% H_2S: 0
Prover: 2"	Meter Run:	Taps:			

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2795	60	Packer		
1.	2:00 x 1.00	5.9		69	2000	14	"		1 hr.
2.	2:00 x 1.00	17.7		38	1760	25	"		1 hr.
3.	2:00 x 1.50	22.1		11	1313	28	"		1 hr.
4.	2:00 x 1.50	24.6		16	1243	35	"		1 hr.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	17.02		19.1	0.9915	1.182	1.000	321
2	17.38		30.9	1.0210	1.182	1.000	640
3	42.11		35.3	1.0510	1.182	1.000	1,954
4	40.11		37.9	1.0450	1.182	1.000	1,884
5							

NO.	P_r	Temp. °R	T_r	Z
1	.023	529	1.35	1.000
2.	.046	499	1.27	1.000
3.	.053	471	1.20	1.000
4.	.057	476	1.21	1.000
5				

Gas Liquid Hydrocarbon Ratio 8.2 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 59.7 Deg.
Specific Gravity Separator Gas .710 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 667 P.S.I.A. P.S.I.A.
Critical Temperature 392 R R

P_c 2203.2 P_c^2 4876.1

NO	P_t	P_w*	P_w^2	$P_c^2 - P_w^2$
1		2015.7	4063.0	813.1
2		1777.3	3158.2	1717.9
3		1706.4	1909.6	2966.5
4		1284.3	1651.4	3224.5
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{4876.1}{3221.5} = 1.514 \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = (1.514)^{1.00}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2989

Absolute Open Flow 2989 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.00

Remarks: * Pw from computer program #4137 based on IPR Manual.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W. D. Adcock	D. E. Simpson	