NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT A ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial Retest [ ] Annual [ ] Special			Test Date: 3-6-69	--
Company: Phillips Petroleum Company	Connection			--
Pool: Undesignated--Devonian--Gas	Formation: Devonian			Unit: --
Completion Date: 1-18-69	Total Depth: 12,885	Plug Back TD: 12,880	Elevation: 4176 KB	Farm or Lease Name: Tower "A" COM
Csg. Size: 5-1/2 / Wt.: 20 / d: / Set At: 12,885	Perforations: From 12,862 To 12,874			Well No.: 1
Tbg. Size: 2-3/8 / Wt.: 4.7 / d: 1.995 / Set At: 12,876	Perforations: From -- To --			Unit: K / Sec.: 34 / Twp.: 12S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: --			County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 189 @ 12,880	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12,876	12,876	.710	1.75	3.56	.05		4	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2602	60	2820	60	
1.	4.00 x 2.000	927	25.9	120	1115	70	1555	70	1 Hr.
2.	4.00 x 2.000	917	4.5	138	1400	70	1737	70	1 Hr.
3.	4.00 x 2.000	898	.25	133	1696	67	2070	67	1 Hr.
4.	4.00 x 2.000	900	.05	133	1930	63	2345	63	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	19.81	156.05	940.2	.9469	1.187	1.070	3,718
2.	19.81	64.69	930.2	.9325	1.187	1.061	1,501
3.	19.81	15.09	911.2	.9364	1.187	1.058	352
4.	19.81	6.75	913.2	.9364	1.187	1.058	157
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.41	580	1.52	.874
2.	1.39	598	1.57	.888
3.	1.36	593	1.56	.893
4.	1.36	593	1.56	.893
5.				

Gas Liquid Hydrocarbon Ratio 23 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 54.2 Deg.
Specific Gravity Separator Gas .710 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature 381 R ____ R

* P_c 2833.2 P_c^2 8027

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1				
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{8027}{5568}$ $1.44_{(2)}$ $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.44$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5,354$

Absolute Open Flow 5,354 Mcfd @ 15.025 | Angle of Slope θ 45 | Slope, n 1.00

Remarks: *Casing pressure
Retest on well first test taken 2-24-69. ~~P_t's were calculated by Phillips Computer Program #1197 which is based on 1966 Manual with adjustments to conform to NMOCC specifications.~~

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