NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

AUG 25 1967

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8-8-67	
Company: J. M. Huber Corporation		Connection: None			
Pool: Wildcat		Formation: Strawn		Unit: P	
Completion Date: 8-13-67	Total Depth: ?	Plug Back TD: ?	Elevation: 3259' K.B.	Farm or Lease Name: Yates-Federal	
Csg. Size: 4½" / Wt.: 11.6 / d: 4.000 / Set At: 10,870		Perforations: From 10,536' To 10,600'		Well No.: 1	
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 10,234		Perforations: From — To —		Unit: P / Sec.: 32 / Twp.: 20S / Rge.: 29E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10,198		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 178 @ 10,620	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 10,593	H: 10,593	Gg: 0.615	% CO_2: ?	% N_2: ?	% H_2S: —
Prover: 2"	Meter Run: —	Taps: —			

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI							2604.0		Pkr.		163 hr.
1.	2	x	5/16	155.2		103	2454.0				1 hr.
2.	2	x	5/16	282.5		100	2322.0				1 hr.
3.	2	x	5/16	389.0		94	2180.0				1 hr.
4.	2	x	5/16	647.0		94	1553.0				1 hr.
5.	2	x	5/16	795.0		94	1764.0				1 hr.

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	1.672		168.4	0.9930	1.275	1.014	350
2.	1.672		295.7	0.9936	1.275	1.022	621
3.	1.672		402.2	0.9888	1.275	1.030	856
4.	1.672		660.2	0.9888	1.275	1.050	1,432
5.	1.672		808.2	0.9888	1.275	1.061	1,771

NO.	P_t	Temp. °R	T_r	Z
1	0.30	563	1.54	0.972
2.	0.44	560	1.53	0.958
3.	0.60	554	1.52	0.942
4.	0.98	554	1.52	0.907
5.	1.20	554	1.52	0.889

Gas Liquid Hydrocarbon Ratio 22.5 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 49.5 @ 60 Deg.
Specific Gravity Separator Gas 0.615 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx 0.769
Critical Pressure 671 P.S.I.A. 667 P.S.I.A.
Critical Temperature 365 R 411 R

P_c 2837.7 P_c^2 8052.5

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2748.0	7551.5	501.0
2		2630.0	6916.9	1135.6
3		2469.6	6098.9	1953.6
4		2188.2	4788.2	3264.3
5		1955.8	3825.2	4227.3

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ ____ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ ____

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

Absolute Open Flow 3,000 Mcfd @ 15.025 Angle of Slope θ 51.5 Slope, n 0.792

Remarks: P_c and P_w calculated from BHP test conducted by A & A Engineering Service of Midland, Texas.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Paul E Powers	Paul E Powers	D. M. Holland