NEW MEXICO OIL CONSERVATION COMMISSION

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: 4-21-80	
Company: Gifford, Mitchell & Wisenbaker	Connection: None yet		
Pool: Wildcat	Formation: Strawn		Unit
Completion Date: 4/18/80	Total Depth: 18,577'	Plug Back TD: 15,180'	Elevation: 2910 GL
Farm or Lease Name: White Eagle			
Csg. Size: 7-3/4 / Wt.: 46.1 / d: / Set At: 16,504'	Perforations: From 12,505' To 13,196'		Well No.: #1
Tbg. Size: 3-1/2 / Wt.: 12.95 / d: / Set At: 12,300'	Perforations: From To		Unit: F / Sec.: 22 / Twp.: 26S / Rge.: 36E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 12,300'		County: Lea
Producing Thru: tubing	Reservoir Temp. °F: 160 @ 12,800'	Mean Annual Temp. °F: 60.	Baro. Press. – P_a: 13.2
State: New Mexico			
L: 12850 / H: 12850 / Gg: .632 / % CO_2: .45 / % N_2: .66 / % H_2S: 0 / Prover: / Meter Run: 4.026 / Taps: 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					5791	67			51
1.	4.026 x 2.000	160	4	98	5720	70			51
2.	4.026 x 2.000	185	13	90	5630	70			51
3.	4.026 x 2.000	325	26	82	5430	71			51
4.	4.026 x 2.000	625	58	53	4790	73			51
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	26.32	173.2	.9653	1.2579	1.0127	641
2.	19.81	50.76	198.2	.9723	1.2579	1.0153	1249
3.	19.81	93.77	338.2	.9795	1.2579	1.0283	2354
4.	19.81	192.39	638.2	1.0068	1.2579	1.0651	5142
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.26	558	1.52	.975
2.	.30	550	1.50	.970
3.	.50	542	1.48	.946
4.	.95	513	1.40	.882
5.				

Gas Liquid Hydrocarbon Ratio 27.9 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 47.7 Deg.
Specific Gravity Separator Gas .632 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .632
Critical Pressure 672 P.S.I.A. 672 P.S.I.A.
Critical Temperature 366 R 366 R

P_c 5798.2 P_c^2 33619

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	32870	5723	32754	865
2	31846	5634	31738	1880
3	29628	5435	29535	4084
4	23071	4805	23091	10528
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.1932$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.6105$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 13423$

Absolute Open Flow 13423 Mcfd @ 15.025 Angle of Slope θ 50 Slope, n .839

Remarks:

Approved By Commission: Jerry Sexton
Conducted By: Delton Shirley
Calculated By: Delton Shirley
Checked By: D. B. Stuff