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: 5/25/89	
Company: Mobil Producing TX & NM Inc	Connection:			
Pool: Undesignated, Atoka Gas	Formation: Atoka			Unit: K
Completion Date: 05-25-89	Total Depth: 12120	Plug Back TD: 12110	Elevation: KB 3993	Farm or Lease Name: State Sec 17 Com 3
Csg. Size: 5 1/2 / Wt.: 17 / d: 4.892 / Set At:	Perforations: From 11972 To 12010			Well No.: 3
Tbg. Size: 2 7/8 / Wt.: 6.5 / d: 2.441 / Set At: 12001	Perforations: From Open Ended			Unit: K / Sec.: 17 / Twp.: T17S / Rge.: 35E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At:			County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 163 11991	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.20	State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
.12001	11991	.648	.037	1.17			4"	Flange

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					1379	68			72
1.	4.026 x 1.75	100	2	87	1035	72			1
2.	4.026 x 1.75	100	9	90	886	75			1
3.	4.026 x 1.75	100	21	88	682	76			1
4.	4.026 x 1.75	100	39	80	653	78			1
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	14.93	15.05	113.2	.9750	1.2423	1.0094	275
2.	14.93	31.92	113.2	.9723	1.2423	1.0092	581
3.	14.93	48.76	113.2	.9741	1.2423	1.0093	889
4.	14.93	66.44	113.2	.9813	1.2423	1.0099	1221
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	0.17	547	1.48	.981
2.	0.17	550	1.49	.982
3.	0.17	548	1.48	.982
4.	0.17	540	1.46	.980
5.				

Gas Liquid Hydrocarbon Ratio: 44.5 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 60 Deg.
Specific Gravity Separator Gas: .648 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 706
Critical Pressure: 668 P.S.I.A. 665 P.S.I.A.
Critical Temperature: 370 R 388 R

P_c 1902.2 P_c^2 3618

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1799	3236	382
2		1437	2065	1553
3		1093	1195	2423
4		1034	1069	2549
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4194$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4194$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1733$

Absolute Open Flow: 1733 Mcfd @ 15.025 | Angle of Slope θ: 45 | Slope, n: 1.000

Remarks:

JUN 7 1989

Approved By Commission: ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR | Conducted By: | Calculated By: | Checked By: