NEW MEXICO OIL CONSERVATION COMMSSION
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: 1-11-72	
Company: Mobil Oil Corporation		Connection: NONE		
Pool: Vacuum		Formation: Morrow Gas		Unit: 320
Completion Date: 1-6-72	Total Depth: 11890'	Plug Back TD: 11827'	Elevation: 4038' KB	Farm or Lease Name: Bridges State
Csg. Size: 4½ Liner; Wt.: 13.5; d: 3.920	Set At: 11890	Perforations: From 11465' To 11651'		Well No.: 125 DD
Tbg. Size: 2 3/8"; Wt.: 4.7; d: 1.995	Set At: 11415'	Perforations: From OPEN To ENDED		Unit H; Sec. 14; Twp. 17s; Rge. 34e
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 11415'		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 170° @ 11'358'	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
11558'	–	0.617	0.24	1.08	0.00		X	F

	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						4550		PACKER		50 hrs
1.	6	10/64 2.250	780	8	99	3956	65			2.0
2.	6	13/64 2.250	780	13	80	3753	64			1.0
3.	6	16/64 2.250	780	26	76	3166	63			1.0
4.	6	18/64 2.250	800	32	64	2750	60			1.0
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	21.38	79.65	793.2	0.9645	1.273	1.052	2506.3
2	21.38	101.56	793.2	0.9813	1.273	1.059	3275.5
3	21.38	143.61	793.2	0.9850	1.273	1.061	4659.0
4	21.38	161.32	813.2	0.9962	1.273	1.070	5336.8
5							

NO.	P_r	Temp. °R	T_r	Z
1	1.18	559	1.57	0.904
2.	1.18	540	1.52	0.891
3.	1.18	536	1.51	0.889
4.	1.21	524	1.47	0.874
5				

Gas Liquid Hydrocarbon Ratio 35,926 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 50.1 Deg.
Specific Gravity Separator Gas 0.617 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 672 P.S.I.A. – P.S.I.A.
Critical Temperature 355 R – R

P_c 5981.2 P_c^2 35775.8

NO		P_w *	P_w^2	$P_c^2 - P_w^2$
1	–	5379.2	29160.8	6615.0
2	–	5118.2	26196.0	9578.8
3	–	4480.2	20158.9	15621.9
4	–	4188.2	17541.0	18233.8
5				

$$(1)\quad \frac{P_c^2}{P_c^2 - P_w^2} = 1.962$$

$$(2)\quad \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.641$$

$$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 8758$$

Absolute Open Flow 8750 Mcfd @ 15.025 Angle of Slope θ 53° 42' Slope, n 0.735

Remarks: * BHT & (-7520') 11558' used for pressure calculations

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
[illegible]	COLEMAN PET. ENG.	JOE A. COLEMAN	JOE A. COLEMAN