

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12/26/73		JAN 7 1974	
Company Mobil Oil Corp		Connection —		C.C.C.	
Field Burton Flat		Formation Morrow		Unit 298.91	
Completion Date 12-18-73		Total Depth 11600		Plug Back TD 11599	
Elevation 3203 K.B.		Form or Lease Name Fed. 4 Comm.		Well No. #1	
Cas. Size 5 1/2"	Wt. 17 #/ft	Set At 4.892	11600	Perforations: From 11272 To 11290	
Tub. Size 2 3/8"	Wt. 4.7 #/ft	Set At 1.995	11269	Perforations: From — To OPEN END	
Type Well — Single — Broadhead — G.G. or G.O. Multiple Single				Packer Set At 11256'	
Producing thru Tubing		Reservoir Temp. °F 181° 11599		Mean Annual Temp. °F 60°	
Baro. Press. — P _a 13.2		State New Mexico		County Eddy	
L 11269	H 11272	Gg 0.6126	% CO ₂ 0.87	% N ₂ 2.25	% H ₂ S —
Prover —		Meter Run 4"		Taps Flange	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
1.	4.0 X 1.0			770	26	65	3575	55	1340	—	168 1/2 SL
2.	4.0 X 1.0			810	70	67	3135	55	1340	—	142
3.	4.0 X 1.50			840	21	63	2747	55	1340	—	142
4.	4.0 X 1.50			840	34	67	2375	55	1340	—	142
5.							1930	55	1340	—	142

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	142.7	783.2	0.9952	1.277	1.065	918
2	4.753	240.05	823.2	0.9933	1.277	1.068	1546
3	10.84	133.855	853.2	0.9971	1.277	1.073	1982
4	10.84	170.32	853.2	0.9933	1.277	1.071	2508
5							

NO.	T _f	Temp. °F	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	1.17	525	1.48	0.881	4.72	4.72			669	355
2	1.23	527	1.48	0.876						
3	1.27	523	1.47	0.868						
4	1.27	527	1.48	0.877						
5										

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1	9911	3153	9939	2936
2	7619	2774	7697	5178
3	5799	2434	5925	6950
4	3776	1994	3976	8890
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4468$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3505$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3978$

Absolute Oper. Flow	3505 Mcfd @ 15.025	Angle of Slope	47° 49'	Slope, n	0.91637
Remarks:					
Approved By Commission:					
Conducted By: A. ALAMEDDINE W. H. BRADFIELD		Calculated By: A. R. ALAMEDDINE		Checked By: W. H. BRADFIELD	