

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

Form C-122
Revised 9-1-65

RECEIVED

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Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-5-73	
Company MOBIL OIL CORP.		Connection —	
Field SOUTH CARLS BFD		Formation MORRISON	
Completion Date 10-3-73		Total Depth 12050'	
Plug Back TD 12046'		Elevation 3241 G.L.	
Farm or Lease Name FEDERAL "PP"		Unit 320	
Core Size 7"	Wt. 26 #/ft	Set At 6.276	Perforations: From 11544' to 11563'
Core Size 3 1/2"	Wt. 4.6 #/ft	Set At 1.995	Perforations: From To
Type Well - Single - Broadband - G.C. or G.O. Multiple SINGLE		Packer Set At 11522'	
Producing Thru TUBING		Baro. Press. - P ₀ 13.2	
State NEW MEXICO		County EDDY	
L 11540'	H 11563'	G _g 0.576	% CO ₂ 1.13
% N ₂ 0.19	% H ₂ S —	Prover —	Meter Run 4"
Taps FLANGE			
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	4 X 2		420
2.	4 X 2		445
3.	4 X 2		725
4.	4 X 3		900
5.			
TUBING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	3887	75	26.12 SE
2.	3837	75	1 HR
3.	3775	75	1 HR
4.	3637	75	1 HR
5.	3539	75	1 HR
CASING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	580	—	26.12 SE
2.	620	—	1 HR
3.	700	—	1 HR
4.	800	—	1 HR
5.	900	—	1 HR
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1.	19.81	58.86	433.2
2.	19.81	98.10	458.2
3.	19.81	158.4	738.2
4.	19.81	188.7	913.2
5.			
NO.	P _r	Temp. °R	T _r
1.	0.64	534	1.53
2.	0.68	530	1.52
3.	1.09	519	1.49
4.	1.35	510	1.46
5.			
Gas Liquid Hydrocarbon Ratio ∞ Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas 1.576 X X X X X X X X			
Specific Gravity Flowing Fluid X X X X X			
Critical Pressure 676 P.S.I.A. 676 P.S.I.A.			
Critical Temperature 349 R 349 R			
P _c 900.2 P _c 1521/1.56			
NO.	P _r	P _w	P _w ² - P _r ²
1.	14824	3860	14904.5
2.	14350.5	3822	14571.4
3.	13324	3736	13459.2
4.	12583	3690	13347.7
5.			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 9.098$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.9929$			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 26830$			
Absolute Open Flow 26830 Mcfd @ 15.025			
Angle of Slope 53° 56'			
Slope, n 72824			
Remarks:			
Approved By Commission:			
Conducted By: J.C. GORDON, JR.			
Calculated By: A.R. ALAMEDDINE			
Checked By: J.C. GORDON, JR.			

posted
10-14-73