

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

well File
C-122

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 9-29-73	
Company MOBIL OIL CORP.		Connection O. C. C.	
Pool SOUTH CARUSO		Formation CANYON	
Completion Date 8-16-73		Total Depth 12,090	Plug Back TD 11958
Elevation 3241.6L		Farm or Lease Name FEDERAL "LL"	
Csg. Size 7"	Wt. 26#/ft	Set At 6.276	Perforations: From 10295 To 10306
Thq. Size 2 3/8"	Wt. 4.7#/ft	Set At 1.995	Perforations: From — To —
Type Well - Single - Bradenhead - G.G. or G.O. Multiple DUAL		Packer Set At 10,206	County EDDY
Producing Thru TUBING	Reservoir Temp. *F 150 @ 12090	Mean Annual Temp. *F 60°	Baro. Press. - P _a 13.2
State NEW MEXICO			
L 10206	H 10300	G _g 0.650	% CO ₂ 0.27
		% N ₂ 0.57	% H ₂ S —
Prover —		Meter Run 9'	Taps FLANGE

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. *F	Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.	Temp. *F	
SI							3812	76	0	—	24 HR SE
1.	4 X 1.0			410	30	70	3030	76	0	—	1 HR
2.	4 X 1.0			720	45	66	3280	76	0	—	1 HR
3.	4 X 1.0			750	50	70	1625	76	0	—	1 HR
4.	4 X 1.0			755	92	73	1055	76	0	—	1 HR
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.753	112.7	423.2	.9905	1.240	1.042	686
2	4.753	181.6	733.2	.9943	1.240	1.076	1145
3	4.753	195.35	763.2	.9985	1.240	1.078	1229
4	4.753	179.62	768.2	.9877	1.240	1.078	1127
5							

NO.	P _r	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.63	530	1.41	.921	A.P.I. Gravity of Liquid Hydrocarbons	— Deg.
2	.64	526	1.40	.863	Specific Gravity Separator Gas	.650
3	.64	530	1.41	.861	Specific Gravity Flowing Fluid	XXXXXX
4	.65	533	1.42	.860	Critical Pressure	670 P.S.I.A.
5					Critical Temperature	375 R

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	9261	3095	9275	5357
2	5359	2301	5296	9336
3	2684	1451	2737	1195
4	1141	1086	1180	13452
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.7314$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.430$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.084$

10-5-73

Absolute Open Flow	* 1.430 Mcfd @ 15.025	Angle of Slope @	53° 51'	Slope, n	.750
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Remarks: * UNSATISFACTORY TEST

Approved By Commission:	Conducted By: T.D. NEWTON W.H. BRADFIELD AR. ALAMEDDINE	Calculated By: A.R. ALAMEDDINE	Checked By: W.H. BRADFIELD
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