

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

RECEIVED

Form C-122
Revised 9-1-65

FEB 14 1977

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 2-2-77	
Company Mobil Oil Corp		Connection El Paso and Gas Co. of New Mex.	
Pool Burton Flats Morrow		Formation Morrow	
Completion Date 4-14-74	Total Depth 11400	Plug Back TD 11360	Elevation 3182.5 GL
Furn or Lease Name FEDERAL 12 Com		Well No. 1	
Csg. Size 5 1/2	Wt. 17415.5	Set At 11400	Perforations: From 10952 To 11264
Trq. Size 2 3/8	Wt. 4.7	Set At 10910	Perforations: From OE To
Type Well - Single - Broadhead - G.G. or G.O. Multiple SINGLE		Packer Set At 10900'	County Eddy
Producing Thru TBS	Reservoir Temp. °F 188 @ 10900	Mean Annual Temp. °F 60°	State New Mexico
L 11108	H 11108	Gg 0.586	% CO ₂ 0.85%
			% N ₂ 0.25%
			% H ₂ S -
		Prover 2.75	Meter Run 4.00
			Flange
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
SI	4.00	X	2.75
1.			435.6
2.			448.9
3.			462.4
4.			469.3
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. °F	
	2683	60	
	2405	60	
	2195	60	
	1990	60	
	1625	60	
CASING DATA			
	Press. p.s.i.g.	Temp. °F	
	1000	60	
	1000	60	
	1000	60	
	1000	60	
	1000	60	
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	41.10	55.08	448.8
2	41.10	96.73	462.1
3	41.10	134.13	475.6
4	41.10	172.44	482.5
5			
			Flow Temp. Factor Ft.
			0.9924
			1.0170
			1.0020
			0.9962
			Gravity Factor Fg
			1.306
			1.306
			1.306
			1.306
			Super Compress. Factor, Fpv
			1.037
			1.045
			1.041
			1.041
			Rate of Flow O, Mcd
			3043
			5518
			7510
			9599
Gas Liquid Hydrocarbon Ratio _____ Mcf/ool.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____			
Specific Gravity Flowing Fluid _____			
Critical Pressure _____ P.S.I.A.			
Critical Temperature _____ °F			
F _c 2696.2 F _c ² 7269.5			
NO.	F _c	F _w	F _w ²
1	5847.7	6137.7	1132
2	4876.2	5823	1446
3	4012.8	5767	1502
4	2683.7	5562	1707
5			
(1) $\frac{P_c^2}{P_c^2 - F_w^2} = 4.26$			
(2) $\left[\frac{P_c^2}{P_c^2 - F_w^2} \right]^n = 4.26$			
A.M.F. = 0 $\left[\frac{P_c^2}{P_c^2 - F_w^2} \right]^n = 40900$			
Absolute Open Flow 40900 Mcf @ 14.625			
Angle of Slope θ 45°			
Slope, n 1.00			
Remarks: To get AOF line with 45° angle drawn through last point due to N > 1.00 when line drawn through all 4 pts.			
Approved By: W.L. Riley Jr		Conducted By: W.L. Riley Jr	
Checked By: M.W. Brinkman		Checked By: M.W. Brinkman	