

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11-10-72	
Company Mobil Oil Corporation		Connection Skelly	
Pool Tubb		Formation Tubb Gas	
Completion Date 10-21-72		Total Depth 6535'	Plug Back TD 6535'
		Elevation 3417'GL	Farm or Lease Name Brunson Argo
Csg. Size 5 1/2"	Wt. 17.0	d 4.892	Set At 6535'
		Perforations: From 5883' To 6127'	Well No. 15
Tbg. Size 2 3/8"	Wt. 4.6	d 3.995	Set At 5840'
		Perforations: From OPEN To ENDED	Unit F
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual		Packer Set At 5840'	County Lea
Producing Thru Tubing	Reservoir Temp. °F 102° 5800'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
State New Mexico			
L 6005'	H -	G _g 0.679	% CO ₂ 0.00
		% N ₂ 2.40	% H ₂ S 0.00
Prover		Meter Run X	Taps F

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							1348		PACKER		48.0 Hrs
1.	4	19/64	2	7.4	7.9	46	550	68			3.0
2.	4	17/64	2	6.8	6.8	45	625	65			2.0
3.	4	15/64	2	6.4	5.9	38	772	62			1.0
4.	4	13/64	2	5.4	3.5	42	907	55			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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	58.46	54.76	1.014	1.214	-	1425.6
2	19.81	46.24	46.24	1.015	1.214	-	1128.7
3	19.81	37.76	40.96	1.022	1.214	-	928.1
4	19.81	18.90	29.16	1.018	1.214	-	462.7
5.							

NO.	P _r	Temp. °R	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	0.09	506	1.36	-	28.145	66.7	0.679	X X X X X	664	373
2.	0.07	505	1.35	-						
3.	0.06	498	1.34	-						
4.	0.04	502	1.35	-						
5										

P _c 1703.2 P _c ² 2900.9				
NO.	P _i ²	P _w * ²	P _w ²	P _c ² - P _w ²
1	-	837.2	700.9	2200.0
2	-	1094.2	1197.3	1703.6
3	-	1235.2	1525.7	1375.2
4	-	1510.2	2280.7	620.2
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.319}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1837}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1.286}$$

Absolute Open Flow 1837	Mcf/d @ 15.025	Angle of Slope @ 47° 46'	Slope, n 0.908
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Remarks: *** BHP @ (-2588') 6005' used for pressure calculations**

Approved By Commission:	Conducted By: COLEMAN PET.ENG.CO	Calculated By: JOE A. COLEMAN	Checked By: JOE A. COLEMAN
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NOV 27 1972

OIL CONSERVATION COMM.
HOBBS, N. M.