

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

Form C-122
Revised 9-1-65

☒ Initial ☐ Annual ☐ Special				Date: 5-20-76	
Oil Company: Real Petroleum Company			Lease Name: Southern Union Gas Company		
Well Name:			Location: Morrow		Unit:
Completion Date: 3-6-76		Total Depth: 14300	Perforations: 14165		Production: 374602
Casing Size: 5-1/2	Wt.: 23	d:	G.S.: 14300	Perforations: From 13770 To 13852	Well No.: #1
Plug Size: 2-7/8	Wt.: 6.5	d:	G.S.: 13852	Perforations: From 13770 To 13852	Unit: 3 Ser.: 215 Type: 321
Type Well - Single - Ser. No. - 14300 - G.S. or G.C. - 14300					
Tubing: 2			Reservoir Temp. °F: 60°		State: New Mexico
L: 13816	H: 13816	G: .647	S: .003	T: .594	Flow: - Prover: - yes Change

FLOW DATA						TUBING DATA		CASING DATA		Direction of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. In. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
5.							4200		PKR		40° 15'
1.	4	x	1.50	518.	26	53	2800	60°			1 hr.
2.	4	x	1.50	518.	58	71	2830	60°			1 hr.
3.	4	x	1.50	507.	16	78	3300	60°			1 hr.
4.	4	x	1.50	504.	4	82	3900	60°			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{q_w p_m}$	Pressure P_m	Flow Temp. Factor P_m	Gravity Factor ρ_g	Super. Compress. Factor, F_{sp}	Rate of Flow Q , Mcf/d
1.	10.84	226	531.2	1.002	1.243	1.054	3216
2.	10.84	176	531.2	.9896	1.243	1.049	2452
3.	10.84	91.	526.2	.9831	1.243	1.047	1262
4.	10.84	45.5	517.2	.9795	1.243	1.045	626.
5.							

NO.	P_r	Temp. °F	P_r	Z	Gas Liquid Ratio, Bbls/Mcf	A.P.G. Gravity of Gas, ρ_g	Specific Gravity of Gas, ρ_g	Specific Gravity of Gas, ρ_g	Critical Pressure, P_{cr}	Critical Temperature, T_{cr}
1.	.79	518	1.40	.906	42.59	52.060	.647	XXX XXXXX	670-14-1	8/3
2.	.79	531	1.44	.906						
3.	.773	538	1.46	.913						
4.	.768	542	1.47	.913						
5.										

NO.	P_r	P_m	P_r^2	P_m^2	$P_r^2 - P_m^2$	(1) $\frac{P_r^2}{P_r^2 - P_m^2}$	(2) $\left[\frac{P_r^2}{P_r^2 - P_m^2} \right]^n$
1.	4030.2	16242	2452			1.66	1.36
2.	4223.2	17000	2370				
3.	5523	31170	6600				
4.	5997.4	35970	4860				
5.							

Actual Gas Flow: 5359	App. 15.0	App. 15.0	App. 15.0
Remarks: P _r & P _w Figures were taken from Amerada gauge No. 3 - Ser. No. 13149			

Approved by Commission:	Checked by:	Calculated by:	Checked by:
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