

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

Copy 4 SF
Form C-122
Revised 1-65
RECEIVED

SEP 5 1975

Type Test: ☒ Initial ☐ Annual ☐ Special						Test Date: 8-13-75					
Company: William G. Ross						Connection:		O.G.C. ARTERIA, OFFICE			
Pool: Atoka Atoka Penn.						Formation: Morrow		Unit:			
Completion Date: 8-6-75		Total Depth: 9050		Plug Back TD: 9013		Elevation: 3334 KB		Farm or Lease Name: A. Q. Rogers			
Csq. Size: 4 1/2	Wt.: 11.60	d: 4.000	Set At: 9047.94	Perforations: From 8840 To 8848		Well No. Com. No. 1					
Tbg. Size: 2 3/8	Wt.: 4.70	d: 1.995	Set At: 8712	Perforations: From To		Unit Sec. Twp. Rge. P 3 18S 26E					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single						Packer Set At: 8712.50		County: Eddy			
Producing Thru: Tubing		Reservoir Temp. °F: 156 @ 8650		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 13.2		State: New Mexico			
L: 8844	H: 8844	Gg: 0.680	% CO ₂ :	% N ₂ :	% H ₂ S:	Prover Pos. Ck.	Meter Run:	Taps:			

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.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	114 hrs			2707			2707		Pkr.		
1.	2"	X	8/64	2640		76	2640	76			60 min.
2.	2"	X	9/64	2608		78	2608	78			60 min.
3.	2"	X	11/64	2557		80	2557	80			60 min.
4.	2"	X	16/64	2319		78	2319	78			240 min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	0.2618		2653.2	0.9850	1.213	1.188	985.9
2	0.3346		2621.2	0.9831	1.213	1.184	1238.3
3	0.5090		2570.2	0.9813	1.213	1.186	1846.9
4	1.1120		2332.2	0.9831	1.213	1.192	3686.4
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	3.97	536	1.39	0.709	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	3.92	538	1.40	0.713	Specific Gravity Separator Gas: 0.680
3	3.84	540	1.40	0.711	Specific Gravity Flowing Fluid: _____
4	3.49	538	1.40	0.704	Critical Pressure: 669 P.S.I.A.
5					Critical Temperature: 385 °R

NO.	P _t ²	P _s ²	P _f ²	P _f ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 4.5233142$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.508123$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12932$
1		3470.2	12042	5695	
2		3432.2	11780	831	
3		3377.2	11405	1206	
4		3134.2	9823	2788	
5					

Absolute Open Flow: 12932 Mcfd @ 15.025		Angle of Slope @ 50° 15'		Slope, n: .831595
Remarks: BHP measured with Amerada RPG-3 gauge Serial No. 31203, 0-6000 psi.				
Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: G. W. Taylor	Checked By:	