

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST³ OR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-20-78	
Company Enserch Exploration Inc		Connection Cities Service Company	
Pool South Peterson		Formation Pennsylvanian	
Completion Date 10-15-78		Total Depth 8030'	Plug back TD 7790'
		Elevation 4393.5' GR	
Csg. Size 5 1/2		Wt. 15.5	Perforations From 7702' To 7715'
Tub. Size 2 3/8		Wt. 4.70	Perforations From Open To Ended
Type Well - Single - Protection - G.G. or G.O. Multiple Single		Factor Set At 7651'	County Roosevelt
Producing thru tubing		Reservoir Temp. °F 74 @ 7708	Mean Annual Temp. °F 60
		Baro. Press. - P _a 13.2	State New Mexico
L 7708	H 7708	G _g .757	% CO ₂ 1.15
		% N ₂ 8.35	% H ₂ S 0
		Prover 0	Meter Run 4.0
			flange

FLOW DATA						TUBING DATA		CASING DATA		Deviation 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							1976	62			48.0
1.	4.03	x	1.250	500	3	60	1900	62	0	0	1.0
2.	4.03	x	1.250	500	50	54	1823	62	0	0	1.0
3.	4.03	x	1.250	750	78	54	1673	64	0	0	1.0
4.	4.03	x	2.250	460	58	68	1482	65	0	0	1.0
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. Compens. Factor F _{pv}	Rate of Flow Q, MCFD
1	7.47	39.27	513.2	1.0	1.1493	1.0607	357
2	7.47	160.19	513.2	1.0058	1.1493	1.0635	1471
3	7.47	243.99	763.2	1.0058	1.1493	1.0970	2311
4	25.64	165.67	473.2	.9924	1.1493	1.0523	5099
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas-Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator G _{se}	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.78	520	1.36	.889	0	0	.757	.757	655	383
2.	.78	514	1.34	.884						
3.	1.16	514	1.34	.831						
4.	.72	528	1.38	.903						
5										

P _r 1984.9 P _r ² 3940		(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 3.1778$		(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.1778$	
NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	3660	1910	3646	293	293
2	3372	1843	3396	544	544
3	2843	1709	2921	1019	1019
4	2236	1643	2700	1240	1240
5					

Absolute Open Flow = 16,000		Angle of Slope = 45		Shrinkage = 1.0	
Remarks: All calculations made by Garrett Computer of Dallas, Texas as agreed to by previous conversation with New Mexico Conservation Commission, Santa Fe Office.					
Approved by Conservation:		Conducted by:		Checked by:	