

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form 0-124
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 3-26-82		1980 FSL	
Company: STEVENS OIL COMPANY				Connection: AIR NEW WELL		2660 FWL	
Well: UNDESIGNATED				Formation: ABO		4067	
Test Date: 3-23-82		Total Depth: 4,087 4149		Perforations: 4,067 4149		O.C.D. ARTESIA, CHAVEZ 3,706 GR.	
Pressure: 4.50	Wt. 10.5	d 4.052	Set At 4149 4,087	From 3,859 To 3,962		Well No. 3	
Tub. Size: 2,375	Wt. 4.7	d 1.995	Set At 3989 3,825	From OPEN To		Unit Sec. Twp. Rge. K 13 7S 25 E	
Type well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 104° 3,910		Mean Annual Temp. °F 60°		State NEW MEXICO	
L 3,910	H 3,910	Gg 0.6440	% CO ₂ 0.146	% N ₂ 4.800	% H ₂ S	Prover 2.00	Meter Run

FLOW DATA							TUBING DATA		B.H.P. 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.	CHOKE	
1	2.00	X	.250	400		51°	979	49°	1088		1 HR.
2	2.00	X	.250	825		50°	940	49°	1060	10/64	1 HR.
3	2.00	X	.3125	250		50°	895	45°	1018	16/64	1 HR.
4	2.00	X	.3125	350		50°	780	40°	927	13/64	1 HR.
5							355		807	24/64	1 HR.

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 _{sp}	Rate of Flow Q, Mcf/d
1	1.1150	.00	413.2	1.0088	1.2461	1.0392	602
2	1.1150	.00	838.2	1.0098	1.2461	1.0815	1272
3	6.6380	.00	263.2	1.0254	1.2461	1.0815	2254
4	6.6380	.00	363.2	1.0347	1.2461	1.0815	3139

NO	P ₁	Temp. °F	T ₁	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.62	511	1.43	.926			.6440		663	357
2	1.26	510	1.43	.855						
3	.40	510	1.43	.951						
4	.55	510	1.43	.934						

NO	P ₁	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.2456$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7667$
1	1101.2	1073.2	1151.8	61.0		
2		1031.2	1063.4	149.0		
3		940.2	884.0	329.0		
4		820.2	672.7	540.0		

NO	Rate of Flow	Mold #	Angle of Slope	Slope, n
1	5545.5	15.025	54.9	.7035

REMARKS: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENT.

Approved By Consultant:	Conducted By: DON BENNETT	Calculated By: BENNETT & CATHEY	Checked By:
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