

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 7-4-73		JUL 18 1973	
Company Inexco Oil Company				Connection		O. C. C.	
Pool Catalina - Shaw				Formation Strawn		Unit ARTESIA, OFFICE	
Completion Date 7-7-73		Total Depth 10800		Plug Back TD 10754		Elevation 3710	
Csg. Size 5 1/2		Wt. 17 & 20#		Set At 10800		Perforations: From 9868 To 9878	
Tbg. Size 2 7/8		Wt. 6.5#		Set At 10454		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual Tubing & Casing				Packer Set At 10454		County Eddy	
Producing Thru Csg & Csg		Reservoir Temp. °F 176 @ 9873		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
L 9873		H 9873		G _g 0.609		% CO ₂ Mol 0.0042	
						% N ₂ Mol 0.0088	
						% H ₂ S Nil	
				Prover		Meter Run 4"	
						Taps Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration 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	
SI				1309			Pkr.		1309		
1.	4"	x	1.0	1257	2	97	"		1257	75	1 hr.
2.	4"	x	1.0	1191	3	97	"		1191	75	1 hr.
3.	4"	x	1.0	1073	6.3	97	"		1073	75	1 hr.
4.	4"	x	1.0	972	11	98	"		972	75	1 hr.
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 Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	4.753	35.2	623.2	0.9662	1.279	1.045	216.0
2.	4.753	43.1	623.2	0.9662	1.279	1.045	264.5
3.	4.753	62.8	623.2	0.9662	1.279	1.045	385.4
4.	4.753	82.5	618.2	0.9653	1.279	1.042	504.5
5.							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	Used Simplified				A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	Supercompressibility Tables				Specific Gravity Separator Gas 0.609 XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXX
4.					Critical Pressure 673 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 379 R _____ R

P _f 1698	P _f ² 2883		
NO.	P _t ²	P _s	P _s ² - P _t ²
1	1627	2647	236
2	1541	2376	507
3	1389	1931	952
4	1259	1584	1298
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2883}{2883 - 1298} = 2.14$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.14^1 = 2.14$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.14 \times 216.0 = 462.2$

Absolute Open Flow 900 Mcfd @ 15.025

Angle of Slope @ 55° 3'

Slope, n 0.69897

Remarks: BHP calculated by engineering numerics program.

Approved By Commission	Conducted By: Teffeller, Inc.	Calculated By:	Checked By:
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