

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

File ✓
C-122 file
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12/21/77		JAN 6 1978	
Company Exxon Company USA <i>Coat</i>				Connection El Paso Natural Gas		D. C. C.	
Pool Winchester Upper Penn				Formation Cisco		Un-AMERISIA, OFFICE	
Completion Date 9/1/1977		Total Depth 10400'		Plug Back TD 10300'		Elevation 3320'RKB	
Csq. Size 5 1/2"		Wt. 20.0		d 4.778		Set At 10400'	
Thq. Size 2 7/8"		Wt. 15.5		d 4.950		Set At 9606'	
Perforations: From 9666' To 9978'				Well No. 1			
Perforations: Open Ended				Unit C Sec. 36 Twp. 19 Rge. 28			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9606'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 158 @ 9822		Mean Annual Temp. °F 60°F		Baro. Press. - P _a 13.2	
L 9822		H -		G _g 0.7828		% CO ₂ 0.235	
				% N ₂ 1.965		% H ₂ S 0.000	
				Prover		Meter Run X	
						Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							1718		Packer		48.0
1.	4	6/64	1.750	463	1.00	68	1503				3.0
2.	4	8/64	1.750	463	2.25	74	1356				1.0
3.	4	10/64	1.750	463	4.00	76	1329				1.5
4.	4	15/64	1.750	491	6.76	76	1281				1.5
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mscf/d
1	14.93	21.82	476.2	0.9924	1.130	1.069	390.5
2	14.23	32.73	476.2	0.9868	1.130	1.064	579.8
3	14.93	43.64	476.2	0.9850	1.130	1.064	771.6
4	14.93	58.50	504.2	0.9850	1.130	1.064	1034.4
5.							

NO.	F _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.71	528	1.27	0.875	5.258	59.6	0.7828	XXXXXX	667	411
2	0.71	534	1.30	0.884						
3	0.71	536	1.30	0.884						
4	0.76	536	1.30	0.884						
5										

$P_c = 2620.2$ $P_c^2 = 6865.4$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 6.910$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.220$	
NO.	P _w	P _w *	P _w ²	P _c ² - P _w ²				
1		2581.2	6662.6	202.8				
2		2544.2	6473.0	392.4				
3		2498.2	6241.0	624.4				
4		2423.2	5871.9	993.5				
5								

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3331$			
Absolute Open Flow 3331		Mscf @ 15.025	
Angle of Slope @ 58° 52'		Slope, n 0.604	

Remarks: * Bottom Hole Pressure @ (-6502) 9822' Used for Pressure Calculations			
Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Jarrel Services, Inc.	Joe A. Coleman	Joe A. Coleman

SPW 5 1978

OIL CONSERVATION COMMISSION
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