

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 1/11/74		FEB 20 1974		
Company Penrose Oil Corporation				Connection None				O.C.C. ASTORIA, OREGON	
Pool Winchester				Formation Strawn				Unit	
Completion Date 1/13/74		Total Depth 11,252		Plug Back TD 11,252		Elevation 3311 LB		Farm or Lease Name Barro Federal "A" Co.	
Csg. Size 4 1/2	Wt. 11.6#	d 4.000	Set At 11,252	Perforations: From 10,087 To 10,114		Well No. 1			
Tbg. Size 2 3/8	Wt. 4.6#	d 1.995	Set At 9995	Perforations: From open end To		Unit Sec. Twp. Rge. 1 35 198 28E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Gas-Gas Dual					Packer Set At 9995		County Eddy		
Producing Thru casing		Reservoir Temp. °F 170 @ 10,000		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 9995	H 9995	Gg .750	% CO ₂ -	% N ₂ -	% H ₂ S -	Prover	Meter Run 1	Taps Flange	

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							choke		2555		24
1.	3	x	1.5	290	5	101	10/64		2095	68	1
2.	3	x	1.5	295	9	100	12/64		1785	68	1
3.	3	x	1.5	300	11	95	14/64		1689	68	1
4.	3	x	1.5	376	12.5	102	16/64		1485	70	1
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, Mcfd
1	11.13	38.94	303.2	.9628	1.155	1.033	492
2	11.139	52.67	308.2	.9636	1.155	1.034	675
3	11.13	58.70	313.2	.9671	1.155	1.035	755
4	11.13	69.21	383.2	.9619	1.155	1.041	891
5.							

NO.	P _t	Temp. °R	T _f	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.	0.45	561	1.38	.938	8.175	36.6	.750	.7523	667	408
2.	0.46	560	1.37	.936						
3.	0.47	556	1.36	.933						
4.	0.57	562	1.38	.923						
5.										

P _c 2568.2	P _c ² 6595.7	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.5159}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1.4822}$
NO	P _t ²	P _w	P _w ²
1		2108.2	4444.5
2		1798.2	3233.5
3		1702.2	2897.5
4		1498.2	2244.6
5			

Absolute Open Flow 1321 Mcfd @ 15.025		Angle of Slope 45° 35'	Slope, n .946
Remarks: Friction negligible - See C-122-E for Rate No. 4.			
Approved By Commission:		Conducted By: Wallis & Cooper	Calculated By: <i>[Signature]</i>
		Checked By:	