

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

Form C-122
Revised 9-1-65

c/SF
File

MAY 10 1982

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special				Test Date 1-29-82		62.29' FSL									
Company JACK GRYNBURG + Assoc.				Connection AIR NEW WELL		ARTESIA, OFFICE 1983.97' FEL									
Pool PECOS SLOPE				Formation ABO		Unit 0									
Completion Date 1-29-82		Total Depth 4152		Plug Back TD 4066		Elevation 4149.0 KB									
Casing Size 4.5		Set At 1152		Perforations: From 3664 To 3921		Well No. 1									
Tubing Size 2.375		Set At 1995		Perforations: From OPEN To ENDED		Unit 0 Sec. Twp. Rye. Sec. 29, T 5 S-R 24 E									
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES									
Producing Thru TUBING		Reservoir Temp. °F 112 3608		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2									
L 3793		H 3793		G _g 685		Prover 2.00									
% CO ₂ 1.55		% N ₂ 0.99		% H ₂ S 2.00		Meter Run Taps									
FLOW DATA															
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	B.H.P. PSIA	Temp. °F	Duration of Flow				
SI							930		1015		72 HRS. +				
1.	2.00	X	500	120	0	39	887	43	981		1				
2.	2.00	X	500	295	0	30	793	39	893		1				
3.	2.00	X	500	358	0	27	716	35	821		1				
4.	2.00	X	500	390	0	28	656	32	765		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, Mcld								
1	4.3880	.00	133.2	1.2082	1.2082	1.1033	730								
2	4.3880	.00	308.2	1.0302	1.2082	1.0325	1738								
3	4.3880	.00	371.2	1.0333	1.2082	1.0398	2114								
4	4.3880	.00	403.2	1.0323	1.2082	1.0437	2303								
5															
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.										
1	.20	499	1.41	.974	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.										
2	.47	490	1.39	.938	Specific Gravity Separator Gas _____ 6850 X X X X X X X X										
3	.56	487	1.38	.925	Specific Gravity Flowing Fluid _____ X X X X X 6850										
4	.61	488	1.38	.918	Critical Pressure _____ 659 P.S.I.A. _____ P.S.I.A.										
5					Critical Temperature _____ 353 R _____ R										
$P_c = 1028.2$ $P_c^2 = 1057.2$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.3389$				$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5294$						
NO.	P _i	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3,522.1$										
1		994.2	988.4	69.0											
2		906.2	821.2	236.0											
3		834.2	695.9	361.0											
4		778.2	605.6	452.0											
Absolute Open Flow 3,522.1 Mcld @ 15.025					Angle of Slope 63.4					Slope, n 5000					
Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.															
Approved By Commission:				Conducted By: RICHARD TOWNLEY				Calculated By: BENNETT-CATHEY				Checked By:			