

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

Form O-122
Revised 9-1985

RECEIVED

APR 06 1983

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3/29/83	
Company Liberty Oil & Gas		Connection Air	
Well Wabbert Hdt		Formation Atoka	
Completion Date 3/26/83		Total Length 11686 11,660	Plug Back To 11550
Elevation 3240.8		Land or Lease Owner Lee Federal Com	
Casing Size 7"	WT. 29#	Set At 11686	Perforations From 10735 To 10755
Well No. 2			
Prod. Size 2 3/8	WT. 4/7#	Set At 10619	Perforations From To
Unit G	Sec. 25	Test 20s	28e
Type Well - Single - Production - G.O. or G.O. Multiple		Packer Set At 10619	County Eddy
Dual Gas		Bore Press. - P _b 13.2	State N.M.
Producing thru Tbg.	Reservoir Temp. °F 180 @ 10619	Mean Annual Temp. °F 60°	
L 10619	H 10619	G _g .6444	% CO ₂ .391
		% N ₂ 1.970	% H ₂ S
		Prover	Meter Run 4"
			Flg.

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
51							3640				24 hrs
1.	4 x 1.000			625	1.0	112	3440				1 hr
2.	4 x 1.000			630	5.0	106	3220				1 hr
3.	4 x 1.000			630	10.0	106	3140				1 hr
4.	4 x 1.000			630	20.0	100	2963				1 hr
5.	4 x 1.000			640	43.0	104	2630				1 hr

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. Comp. Factor, F _{spv}	Rate of Flow Q, Mgd
1	4.753	25.26	638.2	.9535	1.246	1.046	149
2	4.753	56.71	643.2	.9585	1.246	1.049	338
3	4.753	80.20	643.2	.9585	1.246	1.049	478
4	4.753	113.42	643.2	.9636	1.246	1.050	680
5	4.753	167.59	653.2	.9602	1.246	1.049	1000

NO.	P _r	Temp. °R	T _r	Z
1	.95	572	1.54	.914
2	.96	566	1.52	.909
3	.96	566	1.52	.909
4	.96	560	1.51	.907
5	.97	564	1.52	.908

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	3653.2	13,345.9	13345.9	1415.1	
2	3234.6	10462.6	2883.3		
3	3155.2	9955.3	3390.5		
4	2976.3	8858.4	4487.5		
5	2649.7	7020.9	6325.0		

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.110$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2.110$

Post ID
5-20-83
Pagan

Absolute Open Flow	2,110	Mold @ 15.025	Angle of Slope @	45°	Slope @	1.000
Remarks:						
Approved By	Conducted By	Calculated By	Checked By			
	Davis Services, Inc.	Rick Pagan				