

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

Form C-122
Revised 9-1-65

MAR 2 1973

Type Test ☐ Initial ☐ Annual ☒ Special						Test Date 2/16/73			
Company Robinson Bros. Oil Producers ✓				Connection				O.C.C. ARTESIA, OFFICE	
Pool Winchester				Formation Wolfcamp				Unit	
Completion Date		Total Depth 10,380		Plug Back TD 9390		Elevation 3296 KB		Farm or Lease Name State "A"	
Csg. Size 5 1/2	Wt. d	Set At 9700	Perforations: From 9064 To 9087		Well No. 1				
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 9100	Perforations: From 8996 To 9000		Unit M	Sec. 36	Twp. 19S	Rge. 28E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 9100		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 148 @ 9150		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 8996	H 8996	G _g .735	% CO ₂ -	% N ₂ -	% H ₂ S -	Prover	Meter Run X	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				*	*		848				72
1.	4	x	1.750	6.7	3.2	58	725	59	775		1
2.	4	x	1.750	6.7	4.6	60	570	58	622		1
3.	4	x	1.750	7.1	5.8	60	470	49	520		1
4.	4	x	1.750	7.1	7.6	62	378	61	460		1
5.	4	x	1.750	6.8	5.0	62	152	61	198		24

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 _{pv}	Rate of Flow Q, Mcfd
1	14.93	21.44	44.9	1.001	1.166	1.000	264
2	14.93	30.82	44.9	1.000	1.166	1.000	379
3	14.93	41.18	50.4	1.000	1.166	1.000	507
4	14.93	53.96	50.4	0.9981	1.166	1.000	663
5	14.93	34.00	46.2	0.9981	1.166	1.000	418

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 493.55 Mcf/bbl.
1	Below limits of table				A.P.I. Gravity of Liquid Hydrocarbons 47.0 Deg.
2					Specific Gravity Separator Gas .735
3					Specific Gravity Flowing Fluid X X X X X
4					Critical Pressure 668 P.S.I.A.
5					Critical Temperature 401 °R

NO.	P _t ²	P _w ² **	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.043$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.033$
1		1177.2	1385.8	296.9		
2		1027.2	1055.1	627.6		
3		861.2	741.7	941.0		
4		642.2	412.4	1270.3		
5		263.2	69.3	1613.4		

Absolute Open Flow 432 Mcfd @ 15.025		Angle of Slope θ		Slope, n .782
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Remarks: * L-10 chart 50"-100# Range Factor 0.7071	
** From Bottom Hole Pressure Bomb at 9000'	

Approved By Commission:	Conducted By: <i>Ralph E. Brown</i>	Calculated By: <i>Wanna Hedges</i>	Checked By: <i>H. L. Smith</i>
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