

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-20-86	
Company Marshall Pipe & Supply Co.				Connection To Air			
Pool Wildcat				Formation Montoya		Unit	
Completion Date		Total Depth 7155'		Plug Back TD		Elevation 4375	
Farm or Lease Name Wendell Best							
Csg. Size 5 1/2"	Wt.	d	Set At 7153'	Perforations: From 7006 To 7042			Well No. 1
Thg. Size 2 3/8"	Wt.	d	Set At	Perforations: From Open-Ended			Unit Sec. Twp. Rge. J 27 2S 27E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At 6995'		County Roosevelt	
Producing Thru Tubing		Reservoir Temp. °F 145 @ 7013		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
State N.M.							
L 7013	H 7013	G _g 0.6768	% CO ₂ 0.403	% N ₂ 6.190	% H ₂ S	Prover	Meter Run 4.026
						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							1993		PKR	CHOKE	72 Hrs
1.	4	x	1.250	840	3.5"	98°	1893			8/64	1 Hr.
2.	4	x	1.250	845	7.3	98	1824			10/64	1 Hr.
3.	4	x	1.250	870	18"	94	1697			12.5/64	1 Hr.
4.	4	x	1.250	870	36	91	1400			16/64	2 Hrs
5.											

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	7.469	54.65	853.2	0.9653	1.215	1.081	518
2	7.469	79.15	858.2	0.9653	1.215	1.081	750
3	7.469	126.09	883.2	0.9688	1.215	1.081	1198
4	7.469	178.31	883.2	0.9715	1.215	1.081	1699
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NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 152.6 Mcf/bbl.
1.		558		.850	A.P.I. Gravity of Liquid Hydrocarbons 47.7 @ 60° Deg.
2.		558		.850	Specific Gravity Separator Gas 0.6768 XXXXXXXXX
3.		554		.850	Specific Gravity Flowing Fluid XXXXX
4.		551		.850	Critical Pressure 656 P.S.I.A. P.S.I.A.
5.					Critical Temperature 361 °R °R

P _c 2076.0 P _c ² 4309.6	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 2.162$	(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.651$			
NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 2.805$
1	*	1997.6	3990.4	319.2	
2	*	1932.8	3735.5	574.1	
3	*	1787.7	3195.8	1113.8	
4	*	1521.9	2316.1	1993.5	
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Absolute Open Flow 2,805 Mcfd @ 15.025	Angle of Slope @ 57°	Slope, n .650
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Remarks: * Calculated from known bottom hole pressures, measured with a Kuster Gauge, Well made 1.6 Bbls. Water and 1.6 Bbls. of condensate during test.

Approved By Commission:	Conducted By: R.B.	Calculated By: B.M.	Checked By: B.M.
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