

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-28-82	
Company Mesa Petroleum Co. ✓				Connection To Atmosphere	
Pool White City Penn.				Formation Morrow	
Completion Date 12-28-82		Total Depth 11,555'		Plug Back TD 11,472'	
				Elevation 3321.4	
Farm or Lease Name Strong Fed Com					
Csg. Size 4 1/2"	Wt. 13.5	d 3.920	Set At	Perforations: From 10,846 To 11,437	
Tub. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 10754	Perforations: From Open Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,742	
Producing Thru Tubing				State New Mexico	
Reservoir Temp. °F 192° @ 11,142		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2#	
L	H	G _g .586	% CO ₂ .743	% N ₂ 1.133	% H ₂ S
Prover				Meter Run 3.00"	
				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							3556		PKR	CHOKE	24 hrs.
1.	3.00 x 1.250			480	11"	70°	3518	60°		7/64	1 hr.
2.	3.00 x 1.250			500	36	45	3442	60		9/64	1 hr.
3.	3.00 x 1.250			500	62	32	3350	60		11/64	1 hr.
4.	3.00 x 1.250			520	96	22	3220	60		12/64	1 hr.
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	6.095	73.66	493.2	.9905	1.306	1.039	603
2	6.095	135.92	513.2	1.015	1.306	1.045	1148
3	6.095	178.38	513.2	1.028	1.306	1.052	1536
4	6.095	226.25	533.2	1.039	1.306	1.064	1991
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ T.S.T.M. _____ Mcf/bbl.
1	.731	530	1.514	.927	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.760	505	1.443	.915	Specific Gravity Separator Gas .5858 _____ X X X X X X X X
3	.760	492	1.406	.904	Specific Gravity Flowing Fluid _____ X X X X X
4	.790	482	1.377	.884	Critical Pressure 675 _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature 350 _____ R _____ R

NO.	P _c	P _w	P _r ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	3569.2	12739.19			6.56	2.7355
1		3531.2	12469.37	269.82		
2		3455.2	11938.40	800.79		
3		3363.2	11311.11	1428.08		
4		3233.2	10453.58	2285.61		
5						

Absolute Open Flow _____ Mcfd @ 15.025				Angle of Slope 60° 30'		Slope, n .535	
Remarks:							
Approved By Division _____ Conducted By: W.S. _____ Calculated By: J.W. _____ Checked By: M.K. _____							

Post ID: 2
1-28-83
Camp + BH