

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

Form C-122
Revised 9-1-65

Type Test ☐ Initial ☐ Annual ☒ Special						Test Date 10/4/76			
Company Dugan Production				Connection New Completion					
Pool Undes.				Formation Pictured Cliffs				Unit	
Completion Date		Total Depth		Plug Back TD		Elevation		Farm or Lease Name Sherman Edward	
Csg. Size 5.500	Wt. d	Set At	Perforations: From 3182 To 3316		Well No. # 2A PC				
Thq. Size 1.660	Wt. 2.4	d 1.380	Set At 3357	Perforations: From To		Unit Sec. Twp. Rge. # 3 29 5			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple						Packer Set At 5200		County Rio Arriba	
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.0		State New Mexico	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	
		.630	1.07	.13		2"			

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							1190		1191		SIP
1.	2"	X	1/8"	1101		56°	1101		1109		2 hrs.
2.	2"	X	3/16"	897		62°	897		988		2 hrs.
3.	2"	X	7/32"	762		64°	762		903		2 hrs.
4.	2"	X	1/4"	505		58°	505		821		2 hrs.
5.	2"	X	1/4"	326		56°	326		675		12 hrs.

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, Mcfd
1	0.265		1113	1.004	1.260	1.114	416
2	0.608		909	.9981	1.260	1.090	757
3	0.839		774	.9962	1.260	1.074	875
4	1.087		517	1.008	1.260	1.051	750
5	1.087		338	1.004	1.260	1.034	481

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.65	516	1.41	.806	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	1.35	522	1.42	.842	Specific Gravity Separator Gas	XXXXXXX
3	1.15	524	1.43	.867	Specific Gravity Flowing Fluid	DO XXXXX
4	.77	518	1.41	.905	Critical Pressure 670 + 4	P.S.I.A. 674
5	.50	516	1.41	.938	Critical Temperature 368 - 0.1	P.S.I.A. 367

NO.	P _t	P _w	P _w ²	P _c ² - P _w ²
1		1127	1270129	177080
2		1000	1000000	447209
3		915	837225	609984
4		833	693889	753320
5		687	471969	975240

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

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$

Absolute Open Flow	625	Mcf/d @ 15.025	Angle of Slope	33°	Slope, n	.65
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Remarks: Flow rates were calculated using NMOCC factors.

Approved By Commission:	Conducted By: F.S. Hamrick	Calculated By: B.J. Broughton	Checked By:
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