

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

Form C-122
Revised 9-1-65

RECEIVED

C/5F C-122

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-27-81		AUG 17 1981	
Company M.W.J. Producing Company ✓		Connection Atmosphere		O.C.D.	
Pool Crow Flats morrow Undesignated		Location Morrow		ARTESIA, OFFICE	
Completion Date 7-11-81		Total Depth 9593		Plug Back TD 9557	
Elevation 3524 G.I.		Farm or Lease Name I		Dog Canyon 364 State	
Csq. Size 4 1/2"	Wt. 9.5#	d 4.090"	Set At 959.3	Perforations: From 9486 To 9502	Well No.
Tbg. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 9517	Perforations: From To	Unit Sec. Twp. Rge. 1 36 16S 27E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At	
Producing Thru Tubing		Reservoir Temp. °F 130° 9450'		Mean Annual Temp. °F 60°	
Baro. Press. - P _a 13.2		State New Mexico		County Eddy	
L 9450	H 9450	Gg .6679	% CO ₂ .399	% N ₂ 406	% H ₂ S 2
Prover 2"		Meter Run		Taps	

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			S.I.				2560		PKR	Choke	24 Hr.
1.	2"	x	.375	250		83	2493			7/64	1 Hr.
2.	2"	x	.375	390		65	2433			11/64	3/4Hr.
3.	2"	x	.375	610		61	2317			15/64	1/2Hr.
4.	2"	x	.375	810		60	2191			17/64	1/2Hr.
5.											

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	2.378		263.2	.9786	1.224	1.025	768
2	2.378		403.2	.9952	1.224	1.043	1218
3	2.378		623.2	.9990	1.224	1.073	1944
4	2.378		823.2	1.000	1.224	1.098	2631
5							

NO.	R _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio T.S.T.M.	Mcf/bbl.
1.	.392	543	1.43	.952	A.P.I. Gravity of Liquid Hydrocarbons -	Deg.
2.	.602	525	1.38	.919	Specific Gravity Separator Gas .6679	XXXXXXXXXX
3.	.930	521	1.37	.869	Specific Gravity Flowing Fluid XXXXX	-
4.	1.23	520	1.37	.829	Critical Pressure 670 P.S.I.A.	- P.S.I.A.
5.					Critical Temperature 380 R	- R

NO.	P _i ²	P _w	P _w ²	P _e ² - P _w ²
1		2515.3	6326.7	330.19
2		2440.7	5956.8	700.12
3		2327.2	5415.9	1241.1
4		2233.7	4989.4	1667.5
5				

P_e *2580 1 P_e² 6656 92

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 3.9922$ (2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2.634$

AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 6.930$

Absolute Open Flow	6,390	Mcf/d @ 15.025	Angle of Slope @ 55° 01'	Slope, n .6997
--------------------	-------	----------------	--------------------------	----------------

Remarks: * Calculated from known Bottom Hole Pressure

Approved By Commission: Conducted By: Calculated By: Checked By: