3-NMOCC 1-File

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: 11/16/76	
Company: Dugan Production Company	Connection: New Well			Unit
Pool: Basin	Formation: Dakota			Part
Completion Date	Total Depth: 6652	Plug Back TD: 6570	Elevation: 5959Gr.	Farm or Lease Name: Molly Pitcher
Csg. Size: 4.500 / Wt.: 10.5 / d: 4.052 / Set At: 6630	Perforations: From 6275 To 6485			Well No.: #1
Tbg. Size: 1.660 / Wt.: 2.4 / d: 1.380 / Set At: 6480	Perforations: From To			Unit: SE/NE Sec.: 14 Twp.: 30 Rge.: 14
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Gas - Single		Packer Set At: None		County: San Juan
Producing Thru: Tubing	Reservoir Temp. °F: @	Mean Annual Temp. °F	Baro. Press. – P_a: 12.0	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.683	1.07	0.64		2"		

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI					1914		1968		SIP
1.	2" X 1/8"	1645		60°	1645		1878		2 hrs.
2.	2" X 3/16"	1393		66°	1393		1742		2 hrs.
3.	2" X 7/32"	1192		68°	1192		1642		2 hrs.
4.	2" X 1/4"	979		65°	979		1426		2 hrs.
5.	2" X 1/4"	742		71°	742		1235		12 hrs.

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	0.2648		1657	1.000	1.291	1.125	637
2.	0.6082		1405	.9943	1.291	1.118	1226
3.	0.8393		1204	.9924	1.291	1.103	1428
4.	1.087		991	.9952	1.291	1.094	1514
5.	1.087		754	.9896	1.291	1.068	1118

NO.	P_t	Temp. °R	T_f	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 1980 P_c^2 3920400

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1890	3572100	348300
2		1754	3076516	843884
3		1654	2735716	1184684
4		1438	2067844	1852556
5		1247	1555009	2365391

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

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

Absolute Open Flow 1,580 Mcfd @ 15.025 Angle of Slope θ 34.5% Slope, n .69

Remarks: _____

Approved By Commission:	Conducted By: Fred Hamrick	Calculated By: Fred Hamrick	Checked By: