NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPC AND ONE POINT BACK PRESSURE EST FOR GAS WELL

Form C-122
Revised 9-1-65

C/SF

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 8-19-80	JAN
Company: FRED POOL				TO AIR	
Pool: Wildcat				PENN	Unit
Completion Date: 8-19-80	Total Depth: 5035		Plug Back T.D.: 4984	Elevation: 3898	Farm or Lease Name: GRYNBERG ~~FEDERAL~~ Com. FEDERAL
Csg. Size: 4 1/2	Wt.: 11.60	d: 4.000	Set At: 5035	Perforations: From 4848 To 4854	Well No.: 1
Tbg. Size: 2 3/8	Wt.: 4.70	d: 2.593	Set At: 4804	Perforations: From OPEN To END	Unit: J Sec.: 13 Twp.: 6S Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 4804		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 123° @ 4851		Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
4851	4851	.669	1.417	13.917			4"	FLANGE

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					1895				
1.	4 X 1.00	510	8	74	1630	71			45 MIN.
2.	4 X 1.00	530	26	70	1420	70			45 MIN.
3.	4 X 1.00	540	52	68	1128	72			60 MIN.
4.	4 X 1.00	540	68	68	965	75			60 MIN.
5.									

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	4.753	64.70	523.2	.9868	1.223	1.034	384
2	4.753	118.84	543.2	.9905	1.223	1.036	709
3	4.753	169.61	553.2	.9924	1.223	1.037	1015
4	4.753	193.95	553.2	.9924	1.223	1.037	1160
5							

NO.	P_t	Temp. °R	T_r	Z
1	.81	534	1.59	.935
2	.84	530	1.58	.932
3.	.86	528	1.58	.930
4	.86	528	1.58	.930
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas .669 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX

Critical Pressure 647 P.S.I.A. _____ P.S.I.A.

Critical Temperature 335 R _____ R

P_c 1908.2 P_c^2 3641.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1672.1	2795.9	845.3
2		1488.6	2215.9	1425.3
3		1218.1	1483.7	2157.5
4		1039.3	1080.1	2561.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.422$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.336$

$\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.550$

Absolute Open Flow 1,550 Mcfd @ 15.025 | Angle of Slope θ 50.5 | Slope, n .824

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W.S.	R.R.	J.W.W.