State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Pogo Producing		Lease or Unit Name: Fed 8	
Type Test: ☑ Initial ☐ Annual ☐ Special		Test Date: 8-28-95	Well No.: 1
Completion Date	Total Depth: 15100	Plug Back TD: 14585	Elevation	Unit Ltr. - Sec. - TWP - Rge.
Csg. Size: 5" / Wt.: 18# / d / Set At	Perforations: From: 14511 To: 14524		County: ~~Eddy~~ Lea
Tbg. Size: 2-7/8, 2-3/8 / Wt.: 6.5, 4.7 / d: 2.314, 1.995 / Set At: 14420	Perforations: From: To:		Pool: Red Tank
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single	Packer Set At: 14420		Formation: ~~Atoka~~ Morrow
Producing Thru: Tbg	Reservoir Temp. °F	Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2	Connection: AIR
L: 14420 / H: 14420	Gg: .598	% CO_2: 1.01	% N_2: .38	% H_2S	Prover: ←	Meter Run: 3.067	Taps: F/F

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					3220				72 Hr.
1.	2.065 X 1.250	100	2.00	82	3000	94	PKR		45 min
2.	2.065 X 1.250	100	6.00	60	2350	94	"		1 Hr.
3.	2.065 X 1.250	100	12.00	55	1705	90	"		45 min
4.	2.065 X 1.250	110	24.00	55	830	90	"		1 Hr.
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.	7.577	15.05	113.2	.9775	1.293	1.006	145
2.	7.577	26.06	113.2	1.000	1.293	1.006	257
3.	7.577	36.86	113.2	1.005	1.293	1.006	365
4.	7.577	52.17	113.2	1.005	1.293	1.006	516
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.16	542	1.53	.988
2.	.16	520	1.47	.988
3.	.16	515	1.44	.988
4.	.16	515	1.44	.988
5.				

Gas Liquid Hydrocarbon Ratio: 4.012 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 55.9 Deg
Specific Gravity Separator Gas: .558 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 6MIX = 1.226
Critical Pressure: * 676 P.S.I.A. P.S.I.A
Critical Temperature: * 353 R F

P_c 3233.2 P_c^2 10453.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		3013.3	9080.1	1373.5
2.		2363.6	5586.9	4866.9
3.		1719.3	2956.1	7497.5
4.		848.1	719.2	9734.0
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.074$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.074$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 554$

Absolute Open Flow: 554 Mcfd @ 15.025 | Angle of Slope θ: 45 | Slope, n: 1.000

Remarks: * = CORRECTED TO 1.01% CO2
12.00 BBLS Condensate During Test 55.9 @ 60°

Approved By Division	Conducted By:	Calculated By:	Checked By: