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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

FEB 10 1999
Form C-122
Revised 4-1-91

30-015-30503

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MARBOR ENERGY CORPORATION						Lease or Unit Name PRIMERO FEDERAL											
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-12-1999			Well No. #1								
Completion Date 2-2-1999		Total Depth 8055		Plug Back TD 8027		Elevation			Unit Ltr. - Sec. - TWP - Rge. D 23 26S 24E								
Csg. Size 5 5		Wt. 17#		d 4.892		Set At 8051		Perforations: From: 7769 To: 7779			County EDDY						
Tbg. Size 2.375		Wt. 4 7		d 1.995		Set At 7729		Perforations: From: To:			Pools Washington Ranch Morrow						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 7729			Formation Morrow								
Producing Thru TUBING		Reservoir Temp. °F 152		Mean Annual Temp. °F		Baro. Press - P. 13.2			Connection 16-7-99								
L		H		Gg 0.572		% CO ₂ 0.364		% N ₂ 0.367		% H ₂ S		Prover		Meter Run 3 068		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							2705				
1.	3	x	1 375	480	4	60	2370		PACKER		1 hr
2.	3	x	1 375	500	20	60	1939				1 hr.
3.	3	x	1 375	500	40	60	1557				1 hr.
4.	3	x	1 375	500	73	60	965				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, F _{pv}	Rate of Flow Q, Mcfd
1.	10 490	44.42	493 2	1.000	1.3222	1.0387	640
2.	10 490	101.31	513 2	1.000	1.3222	1.0403	1462
3.	10 490	143.28	513 2	1.000	1.3222	1.0403	2067
4.	10 490	193.56	513 2	1.000	1.3222	1.0403	2793
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P. I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ XXXXXXXXXXXX
3.					Specific Gravity Flowing Fluid _____ XXXXX
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P_c **2962.6** P_w **8777.0**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		2500.8	6254.1	2522.9
2.		2020.0	4080.6	4696.4
3.		1609.8	2591.6	6185.4
4.		992.7	985.5	7791.5
5.				

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

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ **3286**

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

Absolute Open Flow 3286 Mcfd @ 15.025		Angle of Slope θ _____	Slope, n 1.28
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Remarks: **CHOKE 1st rate 10/64 2nd rate 13/64 3rd rate 18/64 4th rate 23/64**

Approved By Division	Conducted By: KELTIC SERVICES INC	Calculated By: MIKE KELLY	Checked By:
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