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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MURCHISON OIL & GAS							Lease or Unit Name: MARALO FED		
Type Test: ☑ Initial ☐ Annual ☐ Special							Test Date: 3/23/00	Well No.: 3	
Completion Date: 1/27/00	Total Depth: 9500'			Plug Back TD: 9397			Elevation: 3487	Unit Ltr - Sec - TWP - Rge: 22-17S-27E	
Csg. Size: 5 1/2	Wt.: 17#	d: 4.892	Set At: 9500'	Perforations: From: 9164		To: 9360		County: EDDY	
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 9061	Perforations: From:		To:		Pool: Logan Draw Morrow	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE				Packer Set At: 9061				Formation: MORROW	
Producing Thru: tubing	Reservoir Temp. °F: 165		Mean Annual Temp. °F: 60	Baro. Press.-P_a: 13.2				Connection: SALES	

L	H	Gg	%CO_2	%N_2	%H_2S	Prover	Meter Run	Taps
9098	9098	0.661	0.688	0.437	n/a	n/a	2.067	flg

	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					2018	n/a	pkr	n/a	
1	2.067 x 1.000	552	1	84	2000	52			60 min
2	2.067 x 1.000	533	8.3	86	1955	60			60 min
3	2.067 x 1.000	537	25.3	100	1870	64			60 min
4	2.067 x 1.000	535	97.7	72	1680	66			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 F_g	Super Compress Factor F pv	Rate of Flow Q. Mcfd
1							
2	GAS VOLUMES	MEASURED	BY	TOTAL	FLOW	METER	286
3							425
4							710
5							1468

No.	P_r	Temp. °R	T_r	Z
1				
2				
3	TOTAL	FLOW		
4				
5				

Gas Liquid Hydrocarbon Ratio	30.094		Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons	57		Deg.
Specific Gravity Separator Gas	0.661		XXXXXXX
Specific Gravity Flowing Fluid	N/A	XXXXX	
Critical Pressure	673 P.S.I.A.	670	P.S.I.A.
Critical Temperature	374 R.	404	R

P_c 2031.2 P_c^2 4125.8

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	4053.8	2013.2	4053	72.8
2	3873.8	1968.2	3873.8	252.0
3	3546.4	1883.2	3546.4	579
4	2866.9	1693.2	2866.9	1258.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 3.22 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 2.092

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 3.072

Absolute Open Flow: 3.072 Mcfd @ 15.025 | Angle of Slope θ: 58.11 | Slope n: 0.622

Remarks: * WELL MADE 4 BBLS OF 57 API GRAVITY CONDENSATE DURING TEST

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTING	MB	BM