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

SF

Form C-122
Revised October, 1999

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: MEWBOURNE OIL CO.		Lease or Unit Name: ESPERANZA "23"	
Type Test: ☑ Initial ☐ Annual ☐ Special		Test Date: 2/1/02	Well No.: 1
Completion Date	Total Depth: 11934	Plug Back TD: 11711	Elevation	Unit Ltr - Sec - TWP - Rge: 25 20S 38E
Csg. Size: 5 1/2 / Wt.: 17 / d: 4.892 / Set At: 11934	Perforations: From: 11490 To: 11508			County: EDDY
Tbg. Size: 2 7/8 / Wt.: 6.5 / d: 2.441 / Set At: 11334	Perforations: From: To:			Pool:
Type Well-Single-Bradenhead-G.G. or G.O. Multiple: SINGLE	Packer Set At: 11334			Formation: MORROW
Producing Thru: Tubing	Reservoir Temp. °F: 187.7	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
11372	11372	0.602	0.3	1.008	N/A	N/A	3.068	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					3475	N/A	PKR	N/A	
1	3.068 X 1.500	385	8	55	3300				1 HR
2	3.068 X 1.500	395	21	55	3160				1 HR
3	3.068 X 1.500	395	24	55	3145				1 HR
4	3.068 X 1.500	425	64	55	2745				1 HR
5									

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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							787
2							1291
3	TOTAL	FLOW	METER				1381
4							2339
5							

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

Gas Liquid Hydrocarbon Ratio: N/A Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons: N/A Deg.
Specific Gravity Separator Gas: 0.602 XXXXXXX
Specific Gravity Flowing Fluid: N/A XXXXX
Critical Pressure: 674 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 361 R. ____ R

P_c 3488.2 P_c^2 12167.5

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3314.3	10984.7	1182.8
2		3176.3	10088.9	2078.6
3		3161.8	9996.8	2170.8
4		2769.5	7670.3	4497.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$ 2.706 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 2.21

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 5169.2

Absolute Open Flow: 5169.2 Mcfd @ 15.025 | Angle of Slope (): 51.16 | Slope n: 0.805

Remarks: * NO LIQUID MADE DURING TEST.

Approved By Division:	Conducted By:	Calculated By:	Checked By:
	MEWBOURNE OIL	MERV BUECKER	BM