

30-c15-33160

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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

JUN 04 2004

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 19 FED COM					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 4/14/04		Well No. 1	
Completion Date 2/15/04		Total Depth 11670		Plug Back TD 11624		Elevation 3159		Unit Ltr - Sec - TWP - Rge I 19 21S 27E	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11670	Perforations: From: 11286 To: 11334				County EDDY	
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10507	Perforations: From: To:				Pool BURTON FLAT MORROW	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 10485				Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 178		Mean Annual Temp. 60		Baro. Press.-P _a 13.2		Connection SALES	
L 10507	H 10507	Gg 0.602	%CO ₂ 2.791	%N ₂ 1.062	%H ₂ S	Prover	Meter Run 3.067	Taps FLG	
FLOW DATA				TUBING DATA				CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.	Press p.s.i.g.	Temp.
SI						2860			
1	3.068 X 1.750		508	2.5	65	2620			1 HRS
2	3.068 X 1.750		508	10	66	2410			1 HRS
3	3.068 X 1.750		508	40	66	1845			1 HRS
4	3.068 X 1.750		508	75	65	1100			1 HRS
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								708	
2	TOTAL		FLOW	METER				1417	
3								2835	
4								4129	
5									
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio				N/A Mcf bbl.
1					A.P. I. Gravity of Liquid Hydrocarbons				N/A Deg.
2					Specific Gravity Separator Gas				0.602 XXXXXXXX
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid				XXXXXX
4					Critical Pressure				679 P.S.I.A. P.S.I.A.
5					Critical Temperature				351 R. R.
P _c 2873.2 P _{c2} 8255.3					(1) $P_c^2 = \frac{1.216}{P_c^2 - P_w^2}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.216$				
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.022$				
1		2634.4	6940.3	1315					
2		2428.6	5898	2357.3					
3		1885.8	3556.4	4698.9					
4		1211.7	1468.3	6787					
5									
Absolute Open Flow					5.022	Mcf @ 15.025	Angle of Slope (°):	45	Slope n: 1
Remarks: * NO LIQUID MADE DURING TEST.									
Approved By Division:			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM		

MEWBOURNE OIL CO.
ESPERANZA "19" FED COM #1



