

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

Note: Formerly N.M. State 116

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator EXXON USA						Lease or Unit Name Eumont Gas. Com #2													
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 8-19-94			Well No. #3										
Completion Date 4-13-94			Total Depth 3990			Plug Back TD 3855			Elevation			Unit Ltr. - Sec. - TWP - Rge. 29-27-36							
Csg. Size 5 1/2		Wt. 15.5		d		Set At 3990		Perforations: From: 3192 To: 3738			County LEA								
Tbg. Size 2 3/8		Wt. 4.7		d 1.995		Set At 3125		Perforations: From: To:			Pool EUMONT								
Type Well - Single - Bradenhead - G.G. or H.O. Multiple SINGLE						Packer Set At 3125			Formation YATES/SR/ QUEENS										
Producing Thru T.B.G.		Reservoir Temp. °F 93		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2			Connection GPM										
L 3125		H 3125		Gg .706		% CO ₂ 1.56		% N ₂ 3.00		% H ₂ S		Prover		Meter Run 2.067		Taps FLG			
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									192				PRK				24 hr.		
1.	2 X 1.500				30	41.00	64		54				"				"		
2.																			
3.																			
4.																			
5.																			
RATE OF FLOW CALCULATIONS																			
NO.	COEFFICIENT (24 HOUR)		$\sqrt{\frac{h_w P_m}{P_m}}$		Pressure P _m	Flow Temp. Factor Ft.		Gravity Factor Fg.		Super Compress. Factor, F _{pv} .		Rate of Flow Q, Mcfd							
1.	12.76		42.09		43.2	.9962		1.190		1.008		642							
2.																			
3.																			
4.																			
5.																			
NO.	P _r	Temp. °R		T _r	Z	Gas Liquid Hydrocarbon Ratio <u>DRY GAS</u> Mcf/bbl.													
1.	.10	524		1.36	.985	A.P. I. Gravity of Liquid Hydrocarbons <u>DRY</u> Deg.													
2.						Specific Gravity Separator Gas <u>.706</u> XXXXXXXXXXXX													
3.						Specific Gravity Flowing Fluid <u>XXXXXX</u>													
4.						Critical Pressure <u>*669</u> P.S.I.A. P.S.I.A.													
5.						Critical Temperature <u>*385</u> R R													
P _c	205.2	P _c ²		42.1															
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.316$		2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.316$												
1.			10.1	32.0															
2.																			
3.																			
4.																			
5.																			
AOF = Q							$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .845$												
Absolute Open Flow <u>845</u> Mcfd @ 15.025						Angle of Slope θ <u>45</u>			Slope, n <u>1.000</u>										
Remarks: <u>NO FLUID DURING TEST *CORRECTED TO 1.56% CO₂ & 3.00% N₂</u>																			
Approved By Division				Conducted By: <u>PRO WELL TESTERS</u>				Calculated By: <u>BM</u>				Checked By: <u>BM</u>							

SEP 20 1994