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appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

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

RECEIVED
MAY 19 '94

D. D.
SANTA FE, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MERIT ENERGY						Lease or Unit Name STATE Q, COMM					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-13-94		Well No. 1			
Completion Date 4-4-94		Total Depth 11292		Plug Back TD 10998		Elevation		Unit Ltr. - Sec. - TWP - Rge. L 34-21S-26#			
Csg. Size 5"	Wt. 18#	d 4.276	Set At	Perforations: From: 9923 To: 10146				County EDDY			
Tbg. Size 2 7/8	Wt. 6.4	d 2.441	Set At 9847	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or P.O. Multiple single						Packer Set At 9837		Formation STRAWN			
Producing Thru TBG.		Reservoir Temp. °F 178		Mean Annual Temp. °F 60°		Baro. Press - P. 13.2		Connection PIPELINE			
L *10034.5	H 10034.5	Gg .633	% CO ₂ .49	% N ₂ .84	% H ₂ S	Prover		Meter Run 2.067	Taps FLANGE		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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						2010		Pkr.		
1.	2.067	X1.250	383	.04	68	2000				1 hr.
2.	2.067	X1.250	383	19.4	68	1910				1 hr.
3.	2.067	X 1.250	383	31.4	68	1810				1 hr.
4.	2.067	X 1.250	383	67.2	68	1634				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.	8.120	3.99	397.2	.9924	1.257	1.036	42
2.	8.120	87.8	397.2	.9943	1.257	1.036	923
3.	8.120	111.7	397.2	.9924	1.257	1.036	1172
4.	8.120	163.4	397.2	.9924	1.257	1.036	1715
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.59	528	1.43	.932	DRY GAS	
2.	.59	528	1.43	.932	A.P. I. Gravity of Liquid Hydrocarbons	DRY Deg.
3.	.59	528	1.43	.932	Specific Gravity Separator Gas	.633 XXXXXXXXXXXX
4.	.59	528	1.43	.932	Specific Gravity Flowing Fluid	DRY XXXXX
5.					Critical Pressure	670 P.S.I.A. P.S.I.A.
					Critical Temperature	368 R R

P_c 2081.6 P_c² 4332.6

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		2065.9	4267.9	64.7
2.		1962.5	3851.4	481.2
3.		1885.9	3556.6	776.0
4.		1740.0	3027.6	1305.0
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.320$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.54520$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4209$

Absolute Open Flow	4209	Mcf @ 15.025	Angle of Slope Θ	53.5	Slope, n	.74819
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Remarks: **NO FLUID MADE DURING TEST**

***BHP INSTS SET @ THIS DEPTH**

Approved By Division	Conducted By: PRO WELL TESTER	Calculated By: R.A. K.S.	Checked By: B.M.
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