

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-15-91		1991	
Company Meridian Oil Inc.		Connection El Paso Natural Gas		IST. 9	
Pool Niobrara Gallup		Formation Gallup		Unit Huerfano #216	
Completion Date 10-1-91		Total Depth 6504		Plug Bath TD 6282	
Elevation 6579'		Farm or Lease Name Huerfano Unit NP		Well No. 216	
Ceq. Size 4.500	Wt. 10.5#	d K-55	Set At	Perforations: From 5588'	To 5447'
Tbg. Size 2.375	Wt. 4.7#	d J-55	Set At 5620.98	Perforations: From	To
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Single		Packer Set At		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F 12.2	
Baro. Press. - P _a 12.2		State New Mexico		Meter Run Taps	
L	H	G _g .700	% CO ₂	% N ₂	% H ₂ S

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	2.000		.750				370		530		Initial
1.							180	60°	415		15 Min
2.							130	60°	380		30 Min
3.							88	60°	365		1 Hour
4.							38	60°	302		2 Hours
5.							6	62°	287		3 Hours

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	12.365		18.2	1.000	.9258	1.000	208.3448
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
1.					Specific Gravity Separator Gas _____	X X X X X X X X
2.					Specific Gravity Flowing Fluid _____	X X X X X
3.					Critical Pressure _____ P.S.I.A.	P.S.I.A.
4.					Critical Temperature _____ R	R
5.						

NO.	P _i	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4378$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3131$
1		299.2	89,520.64			
2				204,460.20		
3					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 273.5680$	
4						
5						

Absolute Open Flow	274	Mcfd @ 15.025	Angle of Slope	Slope, n	.75
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Remarks:

Approved By Division	Conducted By: Stanley T. ...	Calculated By:	Checked By: Kelly Maxwell
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