

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form O-122
 Revised 9-1-65
ARABILLO PRODUCTION

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-18-78		10-31-78	
Company MESO PETROLEUM COMPANY				Connection EL PASO NATURAL GAS CO.			
Pool BLANCO, South				Formation PICTURE CLIFFS		Unit 4	
Completion Date 8-31-78		Total Depth 4830		Plug Back TD 4808'		Elevation	
Csg. Size 5 1/2"		Set At 4817'		Perforations: From To		Well No. #47	
Thq. Size 1 1/4"		Set At 2368		Perforations: From 2252 To 2296		Unit Sec. Twp. Rm. L 2 27N 8W	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple DUC - GG				Packer Set At		County SAN JUAN	
Producing Thru 4817'		Reservoir Temp. °F 68°		Baro. Press. - P _a		State NEW MEXICO	
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run Taps

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.	
SI							839			
1.			.750			68°	29			1 hr
2.			.750			68°	23			2 hrs
3.			.750			68°	20			3 hrs
4.										
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.							
2.							
3.							
4.				.9924	.9608	1.054	399
5.							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.					Specific Gravity Separator Gas	XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A.
5.					Critical Temperature	R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.				
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0014$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 400$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0012$

Absolute Open Flow	Mcf/d @ 15.025	Angle of Slope θ	Slope, n
Remarks:			
Approved By Commission: Conducted By: <u>GLEN RHODES</u> Calculated By: <u>M.E. DUDGEON</u> Checked By:			

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Form C-122
Revised 7-1-65
AMARILLO PRODUCTION

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-18-78		NOV - 3 1978	
Company MESA PETROLEUM COMPANY			Connection EL PASO NATURAL GAS CO.		
Pool BLANCO			Formation MESQUERDE		Unit JLF GD BC TLC
Completion Date 8-31-78		Total Depth 4830		Plug Back TD 4808'	
Csg. Size 5 1/2		Wt. 14#		Set At 4817	
Perforations: From To		Perforations: From To		Well No. #47	
Tbg. Size 2 1/4		Wt.		Set At 4583	
Perforations: From To		Perforations: From To		Unit Sec. Twp. Rge. L 2 27N 8W	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Dual - G.G.			Packer Set At		County San Juan
Producing Thru TUBING		Reservoir Temp. °F		Mean Annual Temp. °F 71°	
Baro. Press. - P _a		Prover 3/4		Meter Run Taps	
L H		Gg .650		% 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. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							1044			
1.			.750			68°	307			1 hr
2.			.750			69°	245			2 hr
3.			.750			71°	254			3 hr
4.										
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 Fpv	Rate of Flow Q, Mcfd
1							
2							
3							
4				.9896	.9608	1.059	3112
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2					Specific Gravity Separator Gas	.650
3					Specific Gravity Flowing Fluid	X X X X X
4					Critical Pressure	P.S.I.A.
5					Critical Temperature	R

NO.	P _t ²	P _w ²	P _r ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.0677$	(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.0504$
1						
2						
3						
4						
5						

AOF = Q $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 3269$

Absolute Open Flow		Mcf/d @ 15.025	Angle of Slope θ	Slope, n
Remarks:				

Approved By Commission:	Conducted By: GLEN RHODES	Calculated By: M.E. DUDGEON	Checked By:
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