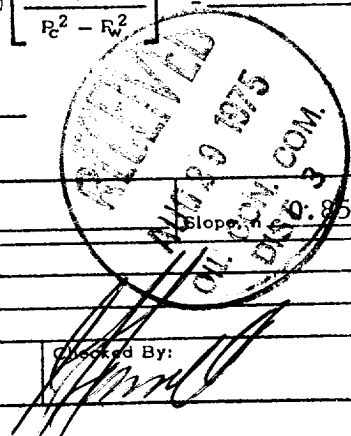


XC: 3 State
1 Archer
2 EPNG

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 8-22-75	
Company Mesa Petroleum Co.		Connection El Paso Natural Gas Co.	
Pool Blanco		Formation Pictured Cliffs	
Completion Date 8-15-75		Total Depth 5824'	Plug Back TD 5779'
Elevation 6589' GL		Farm or Lease Name State Com H	
Csg. Size 7"	Wt. 23#	d Set At 3645'	Perforations: From 3362' To 3392'
Tbg. Size 1-1/4"	Wt. d	Set At 3349' KB	Perforations: From To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - Gas		Packer Set At	
Producing Thru Tbg.		Reservoir Temp. *F @	
Mean Annual Temp. *F		Baro. Press. - P _a	
State New Mexico		County San Juan	
L		H	G _g
% CO ₂		% N ₂	
% H ₂ S		Prover	
Meter Run		Taps	
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	1.995 X 0.75		
2.			
3.			
4.			
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. *F	
	860		
	174	65	
	166	67	
	159	68	
CASING DATA			
	Press. p.s.i.g.	Temp. *F	
	860		
	764		
	729		
	711		
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1			
2	12.365		171
3			
4			
5			
NO.	P _t	Temp. *R	T _t
1	0.2556	528	1.3822
2			
3			
4			
5			
Z			
Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas 0.67 X X X X X X X X			
Specific Gravity Flowing Fluid X X X X X			
Critical Pressure 669 P.S.I.A. P.S.I.A.			
Critical Temperature 382 R R			
P _c 872 P _c ² 760,384			
NO.	P _t ²	P _w	P _w ²
1		723	522,729
2			
3			
4			
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.1995$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.6873$			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5431$			
Absolute Open Flow: 5431 MCF/D Mcfd @ 15.025 Angle of Slope @			
Remarks:			
Approved By Commission: Conducted By: Calculated By: William Main			



XC: 3 State
1 Archer
2 EPNG

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8/22/75			
Company Mesa Petroleum Co.				Connection El Paso Natural Gas Co.					
Pool Blanco				Formation Mesaverde				Unit	
Completion Date 8-15-75		Total Depth 5824'		Plug Back TD 5779'		Elevation 6589' GL		Farm or Lease Name State Com H	
Csq. Size 4-1/2"	Wt. 10.5#	d	Set At 5819'	Perforations: From 4876' To 5196'		Well No. #4A			
Tbg. Size 2-3/8"	Wt. 4.6#	d	Set At 5730'	Perforations: From 5614' To 5728'		Unit Sec. Twp. Rge. F 32 31N 9W			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual - Gas						Packer Set At 3526'		County San Juan	
Producing Thru Tbg		Reservoir Temp. °F 131 @ 5730'		Mean Annual Temp. °F 74.0		Baro. Press. - P _a		State New Mexico	
L 5730	H 5730	Gg .67	% CO ₂	% N ₂	% H ₂ S	Prover 2	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.		Temp. °F
SI							612	60			72
1.	2 X .75						181	72			3
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	9.942		193	.9886	1.222	1.020	2364
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio <u>Dry</u> Mcf/bbl.	
1.	.29	532	1.39	.962	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.					Specific Gravity Separator Gas <u>.670</u> X X X X X X X X	
3.					Specific Gravity Flowing Fluid <u>X X X X X</u>	
4.					Critical Pressure <u>669</u> P.S.I.A. _____ P.S.I.A.	
5.					Critical Temperature <u>382</u> R _____ R	

P _c 626.4 P _c ² 392.4			
NO.	P _t ²	P _w	P _w ²
1			203.3
2			
3			
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.4040$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7187$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.0401$

Absolute Open Flow <u>7187 MCF/D</u> Mcfd @ 15.025		Angle of Slope θ _____
Remarks: _____		

Approved By Commission:	Conducted By:	Calculated By: J. L. Farrell	Checked By:
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