

C-122
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Form C-122
Revised 9-1-65

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FORM

RECEIVED

MAY 22 1975

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-13-75		O. C. C.	
Company Mark Production Company		Connection None		ARTESIA, OFFICE	
Pool Undesignated		Formation Morrow Gas		Unit -	
Completion Date 4-26-75		Total Depth 9200		Plug Back TD 9180	
Elevation 3730 GL		Farm or Lease Name Foster			
Csg. Size 4 1/2	Wt. 11.6	d 4.000	Set At 9200	Perforations: From 8875 To 8898	
Trg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 8765	Perforations: Open ended From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8765	
Producing Thru Tubing		Reservoir Temp. °F 160 @ 8700		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 8887	H -	Gg 0.587	% CO ₂ 0.688	% N ₂ 0.699	% H ₂ S 0.00
Prover X		Meter Run F		Taps F	

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. DWT	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							2677				96.0
1.	3 12/64	2.25	400	2.0	90	1206	76		Packer		1.0
2.	3 16/64	2.25	400	2.5	87	823	75				1.0
3.	3 20/64	2.25	400	3.0	95	576	74				1.0
4.	3 24/64	2.25	400	3.5	96	467	67				1.0
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	28.78	28.74	413.2	0.9723	1.305	1.028	1078.9
2	28.78	32.14	413.2	0.9750	1.305	1.028	1209.9
3	28.78	35.21	413.2	0.9680	1.305	1.026	1313.4
4	28.78	38.03	413.2	0.9671	1.305	1.026	1417.2
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio 627.450 Mcf/bbl.
1.	0.61	550	1.57	0.947	A.P.I. Gravity of Liquid Hydrocarbons 45.1 Deg.
2.	0.61	547	1.56	0.946	Specific Gravity Separator Gas 0.587 X X X X X X X X
3.	0.61	555	1.59	0.950	Specific Gravity Flowing Fluid X X X X X
4.	0.61	556	1.59	0.950	Critical Pressure 675 P.S.I.A. - P.S.I.A.
5.					Critical Temperature 350 R - R

P _c 3238.2 P _c ² 10485.9				
NO.	P _t ²	P _w *	P _w ²	P _c ² - P _w ²
1		1867.2	3486.4	6999.5
2		1544.2	2384.6	8101.3
3		1219.2	1486.4	8999.5
4		837.2	700.9	9785.0
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.498$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.380$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1489$$

Absolute Open Flow 1489 Mcfd @ 15.025	Angle of Slope 51° 28'	Slope, n 0.797
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Remarks: * BHP @ (-5157)' 8887' used for pressure calculations

Approved By Commission:	Conducted By: Coleman Petr. Engr. Co	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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