

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

Copy 2515
Form C-122C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-21-73		NOV 21 1973	
Company Yates Petroleum Corp.				Connection Transwestern Pipeline Co.		O.C.C. ARTESIA, OFFICE	
Pool <i>Eagle Creek above mesa</i>				Formation Atoka		Unit	
Completion Date 8-17-73		Total Depth 8865		Plug Back TD 8825		Elevation 3412 KB	
Farm or Lease Name Armstrong "CT"				Well No. 1			
Csg. Size 4 1/2	Wt. 11.6, 10.5	d 5	Set At 8825	Perforations: From 8381 To 8619		Unit Sec. Twp. Rge. L 5 18S 26E	
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 8269	Perforations: From To			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas				Packer Set At 8269		County Eddy	
Producing Thru tbg		Reservoir Temp. °F 146 @ 8500		Mean Annual Temp. °F		Baro. Press. - P _a 13.2	
State N. Mex.							
L 8500	H 8500	G _g 0.638	% CO ₂ 0.39	% N ₂ 1.10	% H ₂ S Nil	Prover	Meter Run TWPL
						Taps Flange	

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							2701	67		
1.	2	0.750	480	14	63		2631	60		2 hrs
2.	2	0.750	480	20	62		2614	60		1 hr
3.	2	0.750	480	53	58		2559	56		1 hr
4.	2	0.750	480	100	20		2419	60		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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.720	83.08	493	0.9971	1.252	1.054	297
2	2.720	99.30	493	0.9981	1.252	1.054	356
3	2.720	161.64	493	1.002	1.252	1.050	579
4	2.720	222.04	493	1.041	1.252	1.066	839
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.735	523	1.418	.910	123,000	54.0	0.638	XXXXXXX	671.2	368.7
2.	.735	522	1.416	.910				XXXXX		
3.	.735	518	1.405	.907						
4.	.735	480	1.302	.880						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		3406	11601	1080
2		3387	11472	1209
3		3262	10641	2040
4		3098	9598	3083
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{12681}{11000}$$

$$AOF = Q_2 \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3061$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.140$$

Absolute Open Flow	3061	Mcfd @ 15.025	Angle of Slope @	0.9184
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Remarks: ***BHP @ 8500' used for pressure calculations. Flow rates restricted by heater capacity and freezing conditions.**

Approved By Commission:	Conducted By: Don Weaver; J. Moore	Calculated By: Eddie Mahfood	Checked By:
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