

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-22-75		AUG 7 1975	
Company Harvey E. Yates Co., Inc.				Connection		O.C.C.	
Pool Burton Flat <i>renew</i>				Formation Morrow		Unit ARTEZIA, OFFICE	
Completion Date		Total Depth 11750		Plug Back TD 11710		Elevation 3300 GL	
Farm or Lease Name Cedar Hills Unit				Well No. 2			
Csg. Size 5 1/2"	Wt. 17# & 20#	Set At 11750	Perforations: From 11332 To 11448		Unit 2		
Tbg. Size 2 7/8"	Wt. 6.5	Set At 11252	Perforations: From 11545 To 11633		Unit 2		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11252		County Eddy	
Producing Thru 2 7/8"		Reservoir Temp. °F 167 @ 11202		Mean Annual Temp. °F 70		Baro. Press. - P _a 13.2	
State New Mexico							
L 11483'	H 11483'	G _g 0.600	% CO ₂	% N ₂	% H ₂ S	Prover Pos ck	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	Shut in 39 hrs.										
1.	2"	x	8/64	3282		78	3282	78			60 min.
2.	2"	x	9/64	3120		81	3120	81			60 min.
3.	2"	x	10/64	3081		82	3081	82			60 min.
4.	2"	x	11/64	2953		84	2953	84			60 min.
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.	0.2618		3295.2	0.9831	1.291	1.114	1219.7
2.	0.3346		3133.2	0.9804	1.291	1.117	1482.2
3.	0.4173		3094.2	0.9795	1.291	1.119	1827.1
4.	0.5090		2966.2	0.9777	1.291	1.122	2138.2
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/obl.
1.	4.91	538	1.50	0.806	A.P.I. Gravity of Liquid Hydrocarbons	Dry Gas	Deg.
2.	4.67	541	1.51	0.801	Specific Gravity Separator Gas	0.600	XXXXXXX
3.	4.61	542	1.51	0.798	Specific Gravity Flowing Fluid	XXXXX	
4.	4.42	544	1.52	0.795	Critical Pressure	671	P.S.I.A.
5.					Critical Temperature	358	R

P _f 4623.2 P _f 2 21374			
NO.	P _t ²	P _s ²	P _f 2 - P _s 2
1		4335.2	18794
2		4180.2	17474
3		4058.2	16469
4		3964.2	15715
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 5.4805$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5.37635$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 7969$$

P_c

Absolute Open Flow 7969 Mcfd @ 15.025		Angle of Slope @ 45° 20'	Slope, n 0.98872
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Remarks: BHP measured with Amerada RPG-3 gauge Serial No. 12468-N 0-6000 psi

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: F. Tefteller	Checked By:
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