File ✓ C-122 File

Form C-122
Revised 9-1-65

N MEXICO OIL CONSERVATION COMM ON

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
SEP 26 1980
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-18-80	
Company: Harvey E. Yates Company ✓			Connection: El Paso		Unit: F
Pool: South Empire Morrow			Formation: Morrow		
Completion Date: 5-2-80	Total Depth: 11200		Plug Back TD: 11132	Elevation: 3540.6GR	Farm or Lease Name: East Travis "17"
Csg. Size: 5 1/2 / Wt.: 20# / d: 4.778 / Set At: 11200			Perforations: From 11052 To 11072		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.70 / d: 1.995 / Set At: 10995			Perforations: From To		Unit: J / Sec.: 17 / Twp.: 18S / Rge.: 29E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 10996		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 181 @ 10950		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11062	11062	0.631	0.69	0.39	None		X	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	70½ hours	L-10 Chart			2642		Pkr.	-	
1.	4" X 1.000	7.48	1.80	82	2570	73	Pkr.	-	60 mins.
2.	4" X 1.000	7.50	3.50	88	2525	74	Pkr.	-	60 mins.
3.	4" X 1.000	7.58	6.00	88	2450	74	Pkr.	-	60 mins.
4.	4" X 1.000	7.65	8.55	82	2350	76	Pkr.	-	60 mins.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$ / $h_w \times P_m$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	13.464	3.162	0.9795	1.259	1.047	261.3
2.	4.753	26.250	3.162	0.9741	1.259	1.046	506.1
3.	4.753	45.480	3.162	0.9741	1.259	1.047	877.7
4.	4.753	65.4075	3.162	0.9795	1.259	1.049	1271.6
5.			L-10 Factor				

NO.	P_t	Temp. °R	T_f	Z
1		USED SIMPLIFIED		
2.		SUPERCOMPRESSIBILITY		
3.		TABLES		
4.				
5.				

Gas Liquid Hydrocarbon Ratio 33.498 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.0 Deg.
Specific Gravity Separator Gas 0.631 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 670 P.S.I.A. ____ P.S.I.A.
Critical Temperature 368 R ____ R

P_c 3674.2 P_f^2 13500

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1	6673	3589.2	12882	618
2	6442	3552.2	12618	882
3	6067	3466.2	12015	1485
4	5585	3340.2	11157	2343
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.761844$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.152506$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5280.326$

Absolute Open Flow 5280 ~~326~~ Mcfd @ 15.025 Angle of Slope θ 50.89 Slope, n 0.812965

Remarks: Bottom hole pressure measured with Amerada RPG-3 Gauge, Serial Number 47616, 0-6000 PSIG

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Tefteller, Inc.	D. A. Warren, Jr.	Jack Hardee