-/SF
Jules
C-122 Jules

NEW MEXICO OIL CONSERVATION COMMSSION

MULTI. JINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 11-11-80	NOV 17 1980
Company: Harvey E. Yates Company		Connection:			O. C. D.
Pool: ~~South~~ Undesignated Empire Morrow		Formation: Morrow			Unit ARTESIA, OFFICE
Completion Date: 7-18-80	Total Depth: 11215	Plug Back TD: 11171	Elevation: 3633.7 GR	Farm or Lease Name: No. Travis 12 Deep	
Csg. Size: 5 1/2 / Wt.: 17 / d: 4.892 / Set At: 11215		Perforations: From 10916 To 10924		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.70 / d: 1.995 / Set At: 10850		Perforations: From 10949 To 10956		Unit: O / Sec.: 12 / Twp.: 18S / Rge.: 28E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10850		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 167 @ 10800	Mean Annual Temp. °F: 70	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10936	10936	0.705	0.58	2.09	Nil		X	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI	69 hours	L-10 Chart			1426		Pkr.	-	
1.	3" X 0.750"	5.8	1.5	80	1300	70	Pkr.	-	60 mins.
2.	3" X 0.750"	6.0	2.5	84	1194	70	Pkr.	-	60 mins.
3.	3" X 0.750"	6.0	5.1	84	850	70	Pkr.	-	60 mins.
4.	3" X 0.750"	6.8	2.6	84	640	70	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	2.675	8.70	L-10 Factor 3.873	0.9813	1.191	1.055	111.1
2.	2.675	15.00	3.873	0.9777	1.191	1.059	191.6
3.	2.675	30.60	3.873	0.9777	1.191	1.059	390.9
4.	2.675	17.68	3.873	0.9777	1.191	1.078	229.9
5.							

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

Gas Liquid Hydrocarbon Ratio: Nil Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: - Deg.
Specific Gravity Separator Gas: 0.705 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 665 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 386 R ____ R

NO	P_t^2	P_f / P_s	P_f^2 / P_s^2	$P_f^2 - P_s^2$
1		1760.2	3098.3	639.0
2		1598.2	2554.2	1183.1
3		1101.2	1212.6	2524.7
4		879.2	773.0	2964.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.480295$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.430472$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 559.172$

Absolute Open Flow: 559.172 Mcfd @ 15.025 Angle of Slope θ: 47.61° Slope, n: 0.91271

Remarks: BHP measured with Amerada RPG-3 Gauge No. 47617, 0-6000 PSI range.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Tefteller, Inc.	D. A. Warren, Jr.	Ted Harden