RECEIVED

FEB 18 1980

O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 2-8-80	
Company: Cotton Petroleum Corporation			Connection: Transwestern		Unit:
Pool: Boyd Morrow			Formation: Morrow		
Completion Date: 1-25-80	Total Depth: 9300		Plug Back TD: 9221	Elevation: 3439Gr 3451 KDB	Farm or Lease Name: Federal "11"
Csg. Size: 4 1/2 / Wt.: 10.5 11.6 / d: 4.000 / Set At: 9300			Perforations: From 9062 To 9096		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.6 / d: 1.995 / Set At: 8933			Perforations: From To		Unit: K / Sec.: 11 / Twp.: 19S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 8902		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 174 @ 9050		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
8933		0.604	N/A	N/A	N/A		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	68 hours								
1.	2" X 1.000"	230	2	44	1968	60	Pkr.	-	60 mins.
2.	2" X 1.000"	240	5	53	1485	60	Pkr.	-	60 mins.
3.	2" X 1.000"	240	1	57	240	60	Pkr.	-	60 mins.
4.	2" X 1.000"	240	2	51	410	60	Pkr.	-	60 mins.
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.946	22.054	243.2	1.016	1.287	1.021	145.6
2.	4.946	35.581	253.2	1.007	1.287	1.022	233.1
3.	4.946	15.912	253.2	1.003	1.287	1.022	* 103.8
4.	4.946	22.503	253.2	1.009	1.287	1.022	* 147.7
5.							

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

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.604 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 671 P.S.I.A. _____ P.S.I.A.
Critical Temperature 358 R _____ R

P_f 3125.2 P_f^2 9767

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	3925	2976.2	8858	909
2	2245	2826.2	7987	1780
3	64	2449.2	5999	3768
4	179	2289.2	5240	4527
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.48708$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.29417$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 767.871$

Absolute Open Flow ~~767.871~~ Mcfd @ 15.025 Angle of Slope θ 55.0° Slope, n 0.70028

Remarks: *Well loaded up with water on 3rd and 4th rate. BHP measured with Emerada RPG-3 Gauge No. 9383, 0-6000 PSI capacity.

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