NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: Nov. 2-3, '71	
Company: V-F PETROLEUM		Connection: NONE YET			
Pool: UNDESIGNATED		Formation: ATOKA		Unit	
Completion Date: 10-22-71	Total Depth: 11,845'	Plug Back TD		Elevation: 4023 RKB	Farm or Lease Name: HUMBLE-TOWNSEND
Csg. Size: 5½ LINER 4" / Wt.: 20# / d: 4.778 / 3.47	Set At: 10,858 / 11,750	Perforations: From 11,800 To 11,810			Well No.: 1
Tbg. Size: 2" EUE / Wt.: 4.70# / d: 1.995"	Set At: 11,714'	Perforations: From OPEN END To			Unit: L / Sec.: 9 / Twp.: 16S / Rge.: 35E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 10,050'			County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 174 @ 11650'	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
11,714'	11,714'	0.636	0.41	0.89	ZERO	X		

	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						4187	60	PACKER		
1.	2.000	0.750	71.7		39	2852	60	"		4 HRS.
2.	2.000	0.750	110.0		44	2178	60	"		5½ "
3.	2.000	0.750	141.2		52	1397	60	"		9 "
4.										
5.	ONLY RAN 3 POINTS ACCOUNT ORIFICE IN BACK PRESSURE VALVE TOO SMALL FOR LARGER VOLUMES.									

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	9.453		84.9	1.021	1.254	*1.000	1028
2	9.453		123.2	1.016	1.254	*1.000	1485
3	9.453		154.4	1.008	1.254	1.016	1874
4							
5		*NOT APPLICABLE					

NO.	P_r	Temp. °R	T_r	Z
1	.13	499	1.35	*1.000
2	.18	504	1.37	*1.000
3	.23	512	1.39	0.969
4				
5	*VALUES NOT INCLUDED IN TABLES.			

Gas Liquid Hydrocarbon Ratio 33.38 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 49.6 Deg.
Specific Gravity Separator Gas 0.636 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure ____ P.S.I.A. ____ P.S.I.A.
Critical Temperature ____ R ____ R

P_c 5615.2 P_c^2 31,530

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		4246.2	18,030	13,500
2		3497.2	12,230	19,300
3		2646.2	7,002	24,528
4	USED AMERADA BOTTOM HOLE PRESSURE			
5	BOMB FOR ABOVE.			

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

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

Absolute Open Flow 2350 Mcfd @ 15.025 | Angle of Slope θ 46.5 | Slope, n 0.959

Remarks: WELL NOT CLEANED UP. UNLOADED ACID WATER AND MUD DURING TEST.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Harry E. Legendre	Harry E. Legendre	

APEX ENGINEERING CO - MIDLAND, TEXAS