NEW XICO OIL CONSERVATION COMMSSIC

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 12-21-72	
Company: TEXACO Inc.			Connection: None		
Pool: Vacuum Morrow North			Formation: Morrow		Unit: J
Completion Date: 12-21-72	Total Depth: 12515		Plug Back TD: 12447	Elevation: 3991	Farm or Lease Name: N. M. "DN" State
Csg. Size: 4 1/2 / Wt.: 13.5 / d: 3.92 / Set At: 12515			Perforations: From 11.550 To 12066		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 11490			Perforations: From To		Unit: J / Sec.: 18 / Twp.: 17 / Rge.: 35
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 11490		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 173 @ 11808	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
11808	11808	0.731	0.500	1.990	0.0		4"	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						4149	60			
1.	4	x 2.00	202.2	4.8	65	4004	68			1 hr.
2.	4	x 2.000	360.6	7.8	65	3832	74			1 hr.
3.	4	x 2.000	423.0	10.2	65	3677	77			1 hr.
4.	4	x 2.000	784.9	10.2	65	3466	78			1 hr.
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	19.810	32.3	215.4	0.9952	1.170	1.008	823
2.	19.810	54.1	373.8	0.9952	1.170	1.011	1384
3.	19.810	66.8	436.2	0.9952	1.170	1.013	1712
4.	19.810	90.4	798.1	0.9952	1.170	1.028	2351
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.33	525	0.96	0.985
2.	0.57	525	0.96	0.978
3.	0.66	525	0.96	0.975
4.	1.21	525	0.96	0.946
5.				

Gas Liquid Hydrocarbon Ratio 6.8 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 43.0 Deg.

Specific Gravity Separator Gas	0.731	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	1.165
Critical Pressure	663 P.S.I.A.	658 P.S.I.A.
Critical Temperature	387 R	544 R

P_c 4162 P_c^2 17324

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	16138	4020	16163	1161
2	14786	3859	14890	2434
3	13618	3713	13783	3541
4	12105	3525	12426	4898
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{17323.9}{5158.6}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.364$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.556$

Absolute Open Flow 5556 Mcfd @ 15.025 Angle of Slope θ 54.6 Slope, n 0.710

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Lee	Computer	