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: 10-15-68	
Company: PENNZOIL UNITED, INC.	Connection: NONE			Unit: -
Pool: UNDESIGNATED	Formation: PENN			
Completion Date: 9-26-68	Total Depth: -	Plug Back TD: 10480'	Elevation: 4259' GL	Farm or Lease Name: PUBCO 33 FEDERAL
Csg. Size: 5 1/2 / Wt.: 17 / d: - / Set At: 10651'		Perforations: From 8508' To 8516'		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 8409'		Perforations: From OPEN To ENDED		Unit: P / Sec.: 33 / Twp.: 8 / Rge.: 31
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 8272'		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 154 @ 8512'	Mean Annual Temp. °F: -	Baro. Press. – P_a: 13.2	State: NEW MEXICO
L: 8512' / H: - / Gg: 0.724	% CO_2: 1.07	% N_2: 2.25	% H_2S: 0.00	Prover: / Meter Run: X / Taps: F

	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						2003	82	-	-	
1.	4	9/64 1.250	300	22"	80	1790	74	PKR	-	2.0
2.	4	10/64 1.250	300	53"	84	1630	71	-	-	1.5
3.	4	14/64 1.250	510	36	84	1492	71	-	-	1.5
4.	4	16/64 1.250	710	40	86	1270	70	-	-	1.0
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	7.469	83.00	313.2	.9813	1.175	1.033	738.4
2.	7.469	128.83	313.2	.9777	1.175	1.031	1139.7
3.	7.469	137.24	523.2	.9777	1.175	1.054	1241.1
4.	7.469	170.09	723.2	.9759	1.175	1.073	1553.1
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.46	540	1.38	0.938
2.	0.46	544	1.39	0.940
3.	0.76	544	1.39	0.901
4.	1.05	546	1.40	0.869
5.				

Gas Liquid Hydrocarbon Ratio: 97414 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 63.0 Deg.
Specific Gravity Separator Gas: 0.724 / XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX / -
Critical Pressure: 688 P.S.I.A. / - P.S.I.A.
Critical Temperature: 390 R / - R

P_c 2659.2 P_c^2 8175.0

NO	P_t^2	P_w *	P_w^2	$P_c^2 - P_w^2$
1		2624.2	6912.7	1262.3
2		2341.2	5481.2	2693.8
3		1972.2	3889.6	4285.4
4		1779.2	3165.6	5009.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 6.476

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2.785

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2056

Absolute Open Flow: 2055 Mcfd @ 15.025
Angle of Slope θ: 61° Slope, n: .55

Remarks: * BHP @ (-4253') 8512' USED FOR PRESSURE CALCULATIONS

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	COLEMAN PETR. ENG.	JOE A. COLEMAN	JOE A. COLEMAN