NEW MEXICO OIL CONSERVATION COMMSSION

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: 3-20-80

Company: TENNECO OIL COMPANY	Connection: TO AIR			
Pool	Formation: ATOKA			Unit
Completion Date: 3-16-80	Total Depth: 13,190	Plug Back TD: 13,070	Elevation: 4128 GL	Farm or Lease Name: KEMNITZ DEEP UNIT LF29
Csg. Size: 5 1/2 / Wt.: 17.00 / d: 4.892 / Set At: 13,188		Perforations: From 12,641 To 12,661		Well No.: 2
Tbg. Size: 2 7/8 / Wt.: 6.40 / d: 2.875 / Set At: 12,568		Perforations: From OPEN To END		Unit: — Sec.: 29 Twp.: 16S Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 12,563		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 200° @ 12,630	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
12,630	12,630	.637	.221	1.737			4"	FLANGE

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					4781				
1.	4 X 2.250	935	3.5	118	4112	65			1 HR.
2.	4 X 2.250	740	6	103	3645	68			1 HR.
3.	4 X 2.250	740	9	95	3360	72			1 HR.
4.	4 X 2.250	740	11	92	3090	72			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	25.64	51.17	748.2	.9485	1.253	1.047	1633
2.	25.64	67.22	753.2	.9610	1.253	1.054	2187
3.	25.64	82.33	753.2	.9680	1.253	1.056	2704
4.	25.64	91.02	753.2	.9706	1.253	1.058	3003
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1.12	578	1.58	.913
2.	1.13	563	1.54	.901
3.	1.13	555	1.52	.896
4.	1.13	552	1.51	.893
5.				

Gas Liquid Hydrocarbon Ratio 72,174 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas .637 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX ____
Critical Pressure 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature 365 R ____ R

* P_c 4871.8 P_c^2 23,734.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	*	4231.6	17906.4	5828.0
2	*	3827.5	14649.8	9084.6
3	*	3514.6	12352.4	11382.0
4	*	3263.1	10647.8	13086.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.814$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.5787$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4.741$

Absolute Open Flow 4,741 Mcfd @ 15.025 Angle of Slope θ 52.5 Slope, n .767

Remarks: BOTTOM HOLE PRESSURES MEASURES WITH KUSTER GAUGE. MADE 5.5 BBLS. CONDENSATE.
*CALCULATED FROM KNOWN BOTTOM HOLE PRESSURE.

Approved By Commission: Conducted By: Calculated By: Checked By: