

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-65

c/sf
File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2/3/83	
Company McCELLEN OIL CORP				Connection Air	
Pool <i>Pross. & Long. Abo</i> ✓				Formation Abo	
Completion Date 2/3/83		Total Depth 3950		Plug Back TD 3885	
				Elevation 3609	
Csg. Size 4 1/2		Wt. 10.5		Set At TD	
Perforations: From 3695		To 3711		Well No. 4-1 4-1	
Tub. Size 2 3/8		Wt. 4.7		Set At 3665	
Perforations: From Open		To Ended		Unit I 7 8S 25E	
Type Well - Single - Branched - G.G. or G.O. Multiple Single				Packer Set At None	
Producing Thru Tubing				County Chaves	
Reservoir Temp. °F 98 @ 3700		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico					
L		H		Cg .656	
				% CO ₂ .049	
				% N ₂ 8.642	
				% H ₂ S	
				Prover 2"	
				Meter Run	
				Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							826	60	710	
1.	2	X	1/8	799		59	813	60	765	1 hr
2.	2	X	3/16	752		65	772	63	715	"
3.	2	X	1/4	628		64	664	63	640	"
4.	2	X	5/16	510		66	550	63	600	"
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mfd
1	.2648		812.2	1.000	1.235	1.087	289
2	.6082		765.2	.995	1.235	1.078	616
3	1.087		641.2	.996	1.235	1.065	913
4	1.672		523.2	.994	1.235	1.051	1129
5							

NO.	P _t	Temp. °F	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Ref. Lab.
1	.				A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ 670 P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ 375 R _____ R

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1	970.2	941	39	
2	923.2	852	128	
3	842.2	709	271	
4	755.2	570	410	
5				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 2.39$

AOI = 0 $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.904$

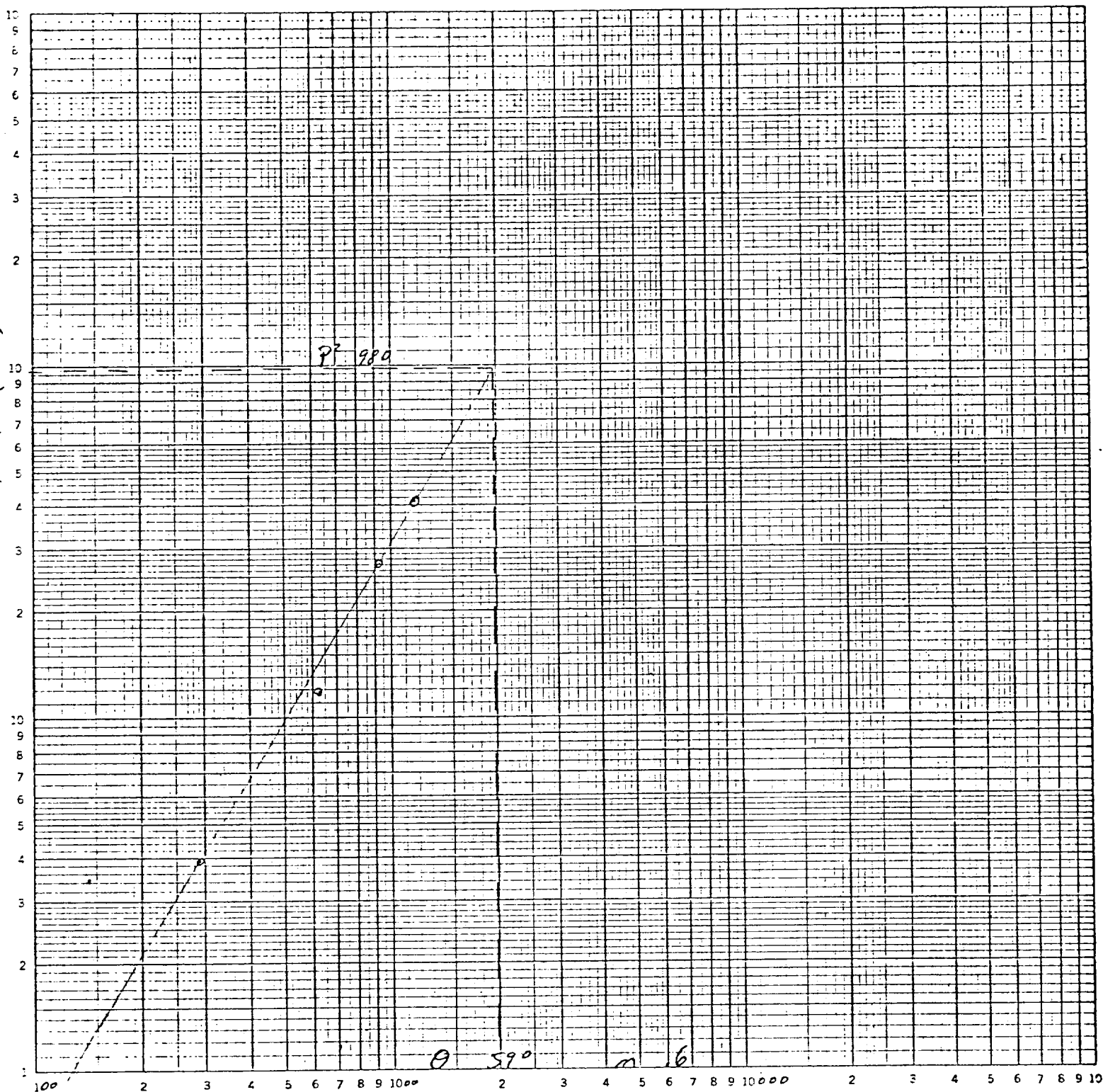
(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.687$

*Post ID-2
3-25-83
Comp & BK*

Absolute Open Flow _____ 1904 _____ Mfd @ 15.025	Angle of Slope @ _____ 59 _____	Slope, n _____ .6 _____
Remarks: Bottom hole pressures recorded with Amerada type gauge		
Approved By _____	Conducted By _____	Calculated By _____
REITIC SERVICE		Kelly

467400
 $P^2 - P^2 (000)$

LOGARITHMIC 3 X 3 CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.



Q
MSCFPD