

JUN 09 1983

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

O.C.D.

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6/3/83		ARTESIA, OFFICE			
Company McCLELLLEN OIL CORP.						Connection Tranwestern					
Pool S. Pecos Slope <i>Abn</i>						Formation Abo					
Completion Date 3-18-83			Total Depth 4435 4510		Plug Back TD 4399 4461		Elevation 3690' 6" R		Farm or Lease Name Leeman Fed		
Ceq. Size 4 1/2		Wt. 10.5		Set At TD 4510		Perforations: From 4259 4256 To 4337			Well No. 2		
Thq. Size 3 3/8		Wt. 4.7		Set At 4220 4244		Perforations: From Open To ended			Unit Sec. Twp. Rge. P 12-9-25		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None			County Chaves		
Producing Thru Tubing		Reservoir Temp. °F 99 4300		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2			State New Mexico		
L		H		G _g .63		% CO ₂		% N ₂		% H ₂ S	
								Prover.		Meter Run 3"	
										Taps Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
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	
SI							985		1000		
1.	3	X	1	145	22	60	392		480		1 hr
2.	3	X	1	145	23.8	61	361		469		"
3.	3	X	1	148	26	63	335		465		"
4.	3	X	1	165	45	64	207		358		"
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, Mcfd
1	4.789	58.99	158.2	1.000	1.25	.93	380
2	4.789	61.36	158.2	.999	1.25	.936	392
3	4.789	64.74	161.2	.997	1.25	.940	411
4	4.789	89.55	178.2	.996	1.25	.964	554
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
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 _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

P _c 1097.2 P _c ² 1203					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.057$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.37$	
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 759$			
1		451.2	203	1001				
2		417.2	174	1030				
3		389.2	151	1052				
4		256.2	65	1138				
5								

Absolute Open Flow 759 Mcfd @ 15.025		Angle of Slope @ 20		Slope, n 5.67	
--------------------------------------	--	---------------------	--	---------------	--

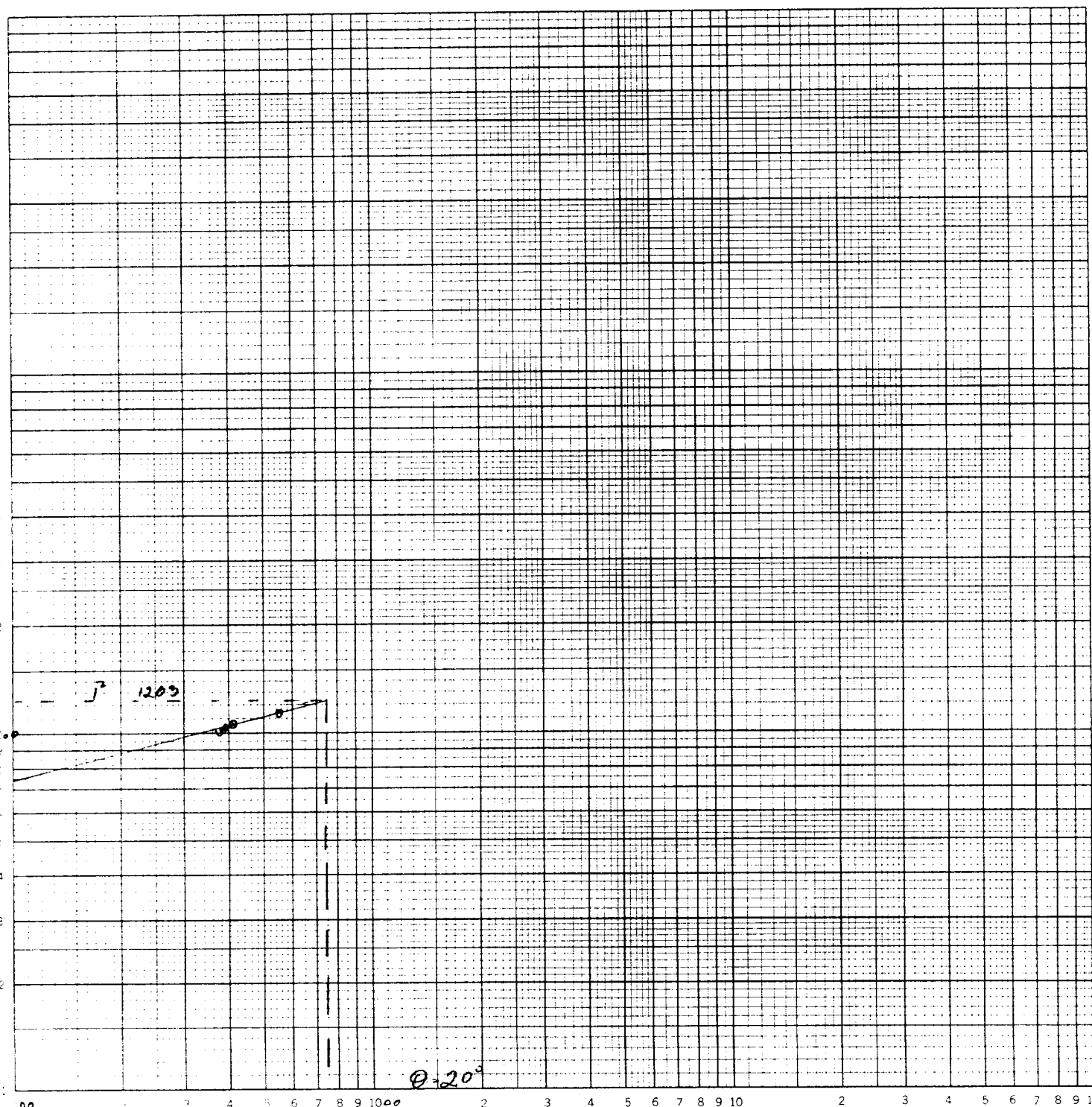
Remarks: Bottom hole pressures recorded with Amerada type gauge.

Approved By Division	Conducted By KELTIC SERVICES	Calculated By Kelly	Checked By:
----------------------	---------------------------------	------------------------	-------------

46 7400

$p^2 - p^2$ (000)

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



Q
MSCFPD