

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☐ Initial ☐ Annual ☒ Special		Test Date 2-8-89	
Company Meridian Oil Inc.		Connection EPNG	
Pool Pitchfork Ranch		Formation Morrow	
Completion Date 12/17/88		Total Depth 15,027'	Plug Back TD 14,093'
Elevation 3342 GR		Farm or Lease Name Pitchfork "10"	
Ceq. Size	Wi.	Set At	Perforations: From 14,880' To 14,905'
Thq. Size	Wi.	Set At	Perforations: From To
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At 12,878'	Unit Sec. Twp. Rge. C 10 25-S 34-E
Producing Thru TBG	Reservoir Temp. °F 223 @ 14,880	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
L 14,880	H 14,880	G _g .600 (assum.)	% CO ₂ % N ₂ % H ₂ S Prover
Meter Run 4,026		Taps FL6	

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
1.	4 x .750			731	53.29	63	890		PKR		48 hrs.
2.											24 hrs.
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	2.661	199.14	744.2	.9971	1.291	1.067	728
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.10	523	1.46	.879	N/A	
2.					A.P.I. Gravity of Liquid Hydrocarbons	N/A
3.					Specific Gravity Separator Gas	.600 (assumed)
4.					Specific Gravity Flowing Fluid	X X X X X X X X
5.					Critical Pressure	671 P.S.I.A.
					Critical Temperature	358 R

$P_c^* = 2606.8$ $P_c^2 = 6795.4$

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		904.6	818.3	5977.1
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.137$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.137$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .828$

Absolute Open Flow 828 Mcfd @ 15,025 Angle of Slope 45 Slope, n 1.000

Remarks: NOTE: This (1) point test is submitted temporarily, as well is still cleaning up. Well made 16 bbl. water on this test & no condensate.

* = Shut-in cal to surface from known BHP.

Approved By Division Conducted By: B. Murray Calculated By: B. Murray Checked By: B.G. Rea - Meridian

For Record only FOR RECORD ONLY

MERIDIAN OIL INC.

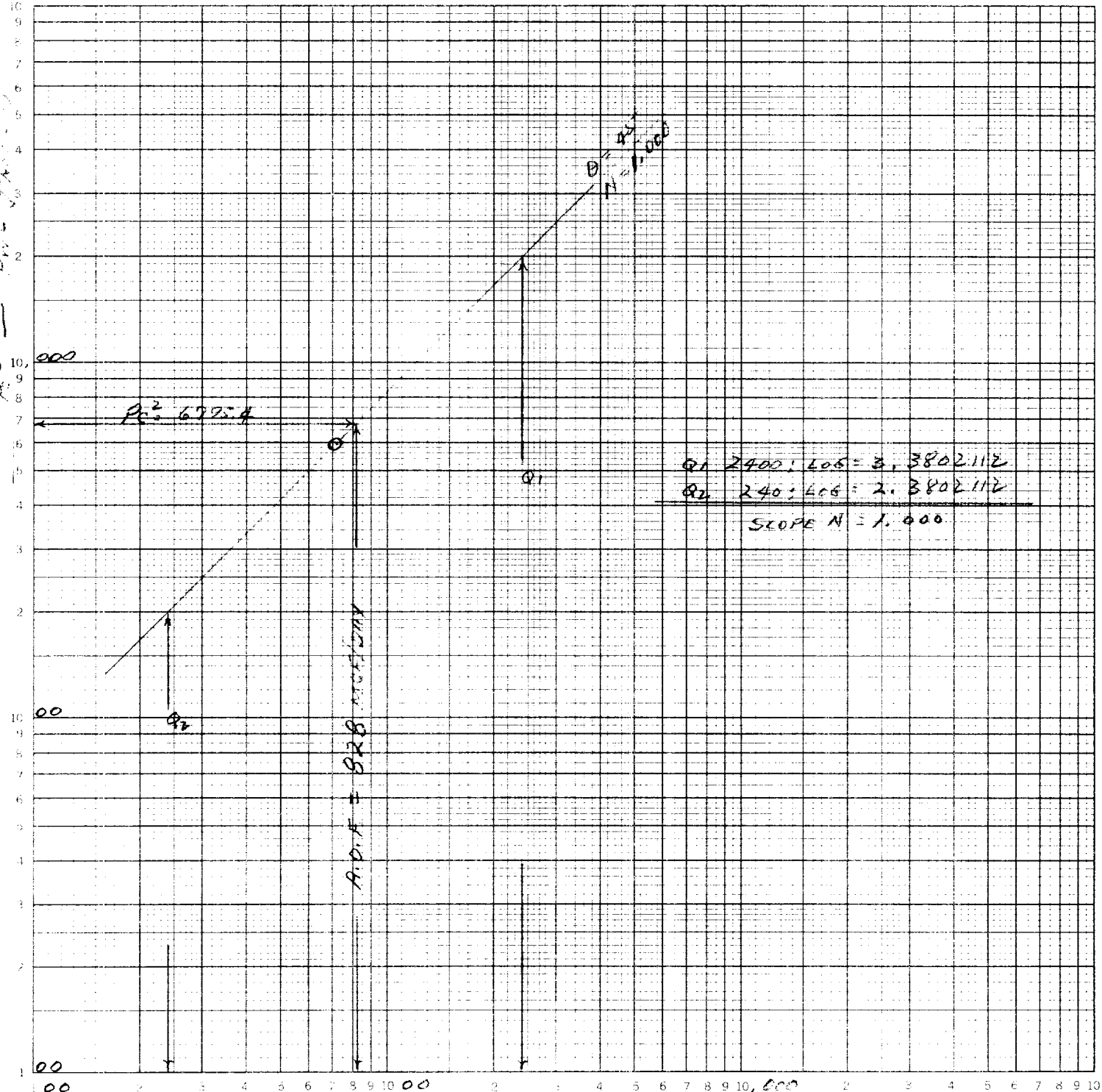
2-5-51

LOG LOGIC

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46 7400

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



Q-1.5F/11

RECEIVED

MAR 10 1989

**OCD
HOBBS OFFICE**