

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT / ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-65

Type Test ☐ Initial ☐ Annual ☐ Special					Test Date 10-7-72				
Company Reading & Bates For Dalport Oil Corp.				Connection					
Pool				Formation				Unit	
Completion Date 12-30-70		Total Depth		Plug Back TD 2640		Elevation 4143 KB		Farm or Lease Name R & J Federal	
Csg. Size 4 1/2	Wt.	d	Set At	Perforations: From 2604 To 2609			Well No. 1		
Tbg. Size	Wt.	d	Set At	Perforations: From To			Unit Sec. Twp. Rge. 20 12S 31E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At		County Chaves		
Producing Thru Tubing		Reservoir Temp. *F @		Mean Annual Temp. *F 60		Baro. Press. - P _a 13.2		State New Mexico	
L	H	G _g 0.944	% CO ₂ -0-	% N ₂ 18g/100	% H ₂ S	4" owt		Meter Run Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. In. Hg.	Diff. h _w	Temp. *F	Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.		Temp. *F
SI						Est.	889.0				2 Years
1.	4" owt X 2.00			7.3		60	800.0	64			1.0Hr
2.	4" owt X 2.00			22.5		60	700.0	65			1.0
3.	4" owt X 2.00			28.5		60	640.0	65			0.5
4.											
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				1.000	.7973	1.000	785
2				1.000	.7973	1.000	1483
3				1.000	.7973	1.000	1713
4							
5							

NO.	P _r	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 0.944 XXXXXXXXXX
3.					Specific Gravity Flowing Fluid XXXXX
4.					Critical Pressure _____ P.S.I.A. P.S.I.A.
5.					Critical Temperature _____ R R

P _c 902.2	P _c ² 814.0	Pt2		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0335$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8230$
NO.	P _t ²	P _w	Pt2	P _c ² - P _w ²	
1	813.2		645.1	168.9	
2	713.2		508.7	305.3	
3	643.2		413.7	400.3	
4					
5					

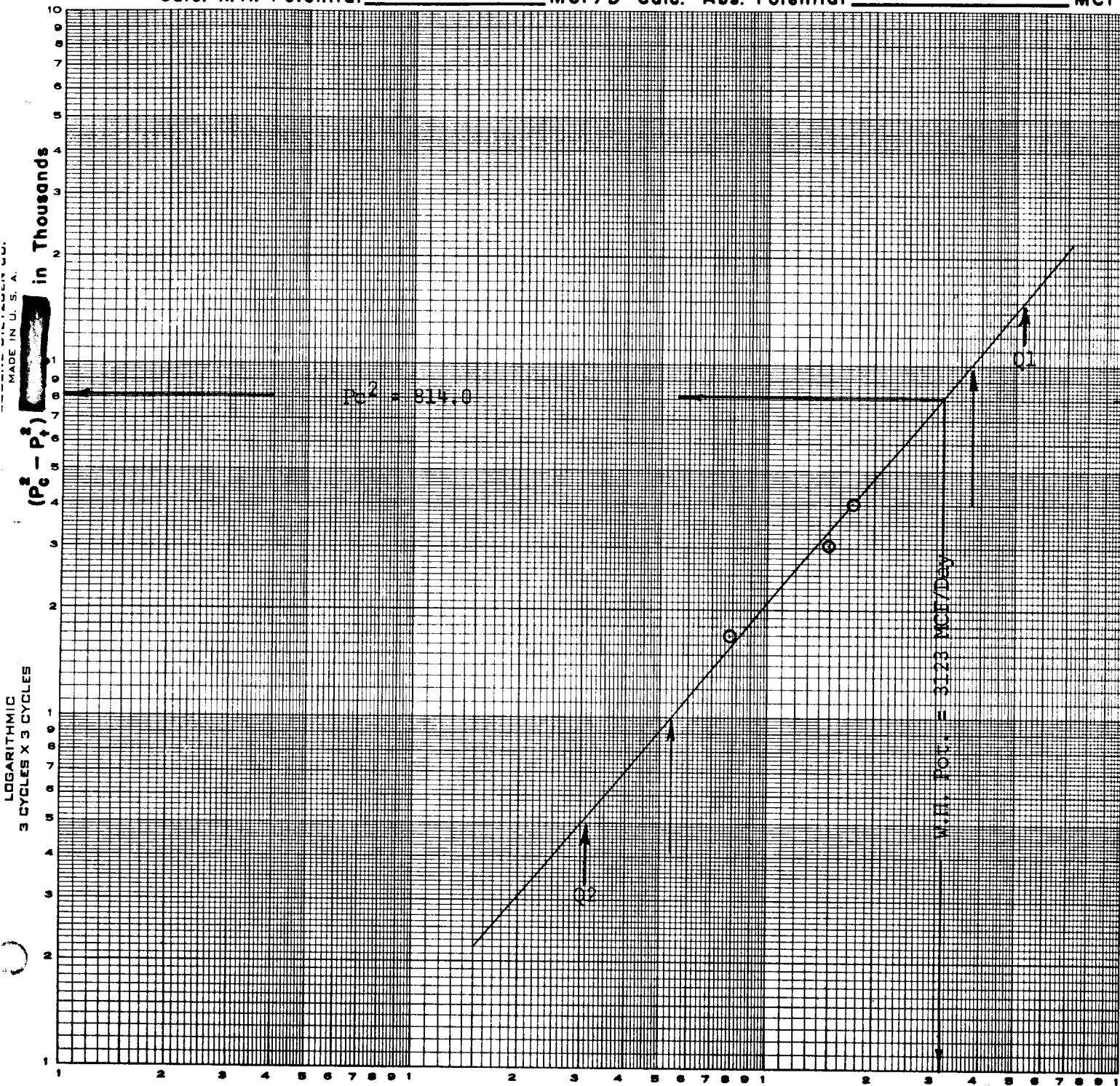
Well head potential	3.123	Mcf/d @ 15.025	Angle of Slope @ 49.8°	W.H. Slope, n 0.846
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Remarks:			

Approved By Commission:	Conducted By: G.J.P	Calculated By: R.L.W.	Checked By: J.W.W.
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BACK PRESSURE CURVE

Operator Reading & B... Lease R & J Federal Well No. 1
 County Chaves Field Location Sec 20, T12S, R31E
 Date of Test 10-7-72 Slope "n" 0.846 W.H. 3,123 Abs.
 Calc. W.H. Potential 3,123 MCF/D Calc. Abs. Potential MCF/D



Q in MCF/Day 3,123

Slope (n) $Q_1 = 3750 = 7.5740313$ $W.H. Pot. = 1713 \left(\frac{814.0}{400.3} \right)^{0.846} = 3,123$
 $Q_2 = 535 = 6.7283538$
 $\frac{6.7283538}{0.8456775}$