

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

SF
122
Form C-122
Revised 9-1-61

RECEIVED

JUL 30 1979

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 7-13-79	
Company Perry R. Bass				Connection None		
Pool Wildcat				Formation Morrow		Unit Big Eddy Unit
Completion Date 7-13-79		Total Depth 12,332		Plug Back TD 12,290		Elevation 3270 GL
Csg. Size 5 1/2		Wt. 20	Set At 12,332	Perforations: From 12216 To 12232		Well No. 72
Trg. Size 2 3/8		Wt. 4.7	Set At 12,180	Perforations: From To		Unit Soc. Twp. Rge. R 3 21S 28E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 12,180	
Producing Thru Tubing		Reservoir Temp. °F 189 @ 12,203		Mean Annual Temp. °F 68		Baro. Press. - P _a 13.2
L 12,180		H 12,180	Gg .585	% CO ₂ None	% N ₂ None	% H ₂ S None
				Prover	Meter Run 4.026	Taps Flange
State New Mexico				County Eddy		

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
1.	4.026	1.50	195	5.2	83	3270	74				60 Min.
2.	4.026	1.50	255	11.0	86	2917	75				60 Min.
3.	4.026	1.50	485	13.2	84	2475	76				60 Min.
4.	4.026	1.50	470	20.5	84	2126	77				60 Min.
5.	4.026	1.50	555	25.0	80	1834	76				60 Min.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Comp. Factor, Fpv	Rate of Flow Q, Mcfd
1	10.84	32.90	208.2	.9786	1.307	1.016	463
2	10.84	54.32	268.2	.9759	1.307	1.021	767
3	10.84	81.09	498.2	.9777	1.307	1.039	1167
4	10.84	99.53	483.2	.9777	1.307	1.038	1431
5	10.84	119.18	568.2	.9813	1.307	1.045	1732

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	927	Mcf/bbl.
1	.31	543	1.53	.968	A.P.I. Gravity of Liquid Hydrocarbons	45	Deg.
2	.40	546	1.54	.959	Specific Gravity Separator Gas	.585	X X X X X X X X
3	.74	544	1.54	.926	Specific Gravity Flowing Fluid	X X X X X	
4	.72	544	1.54	.928	Critical Pressure	672	P.S.I.A.
5	.85	540	1.53	.916	Critical Temperature	354	R

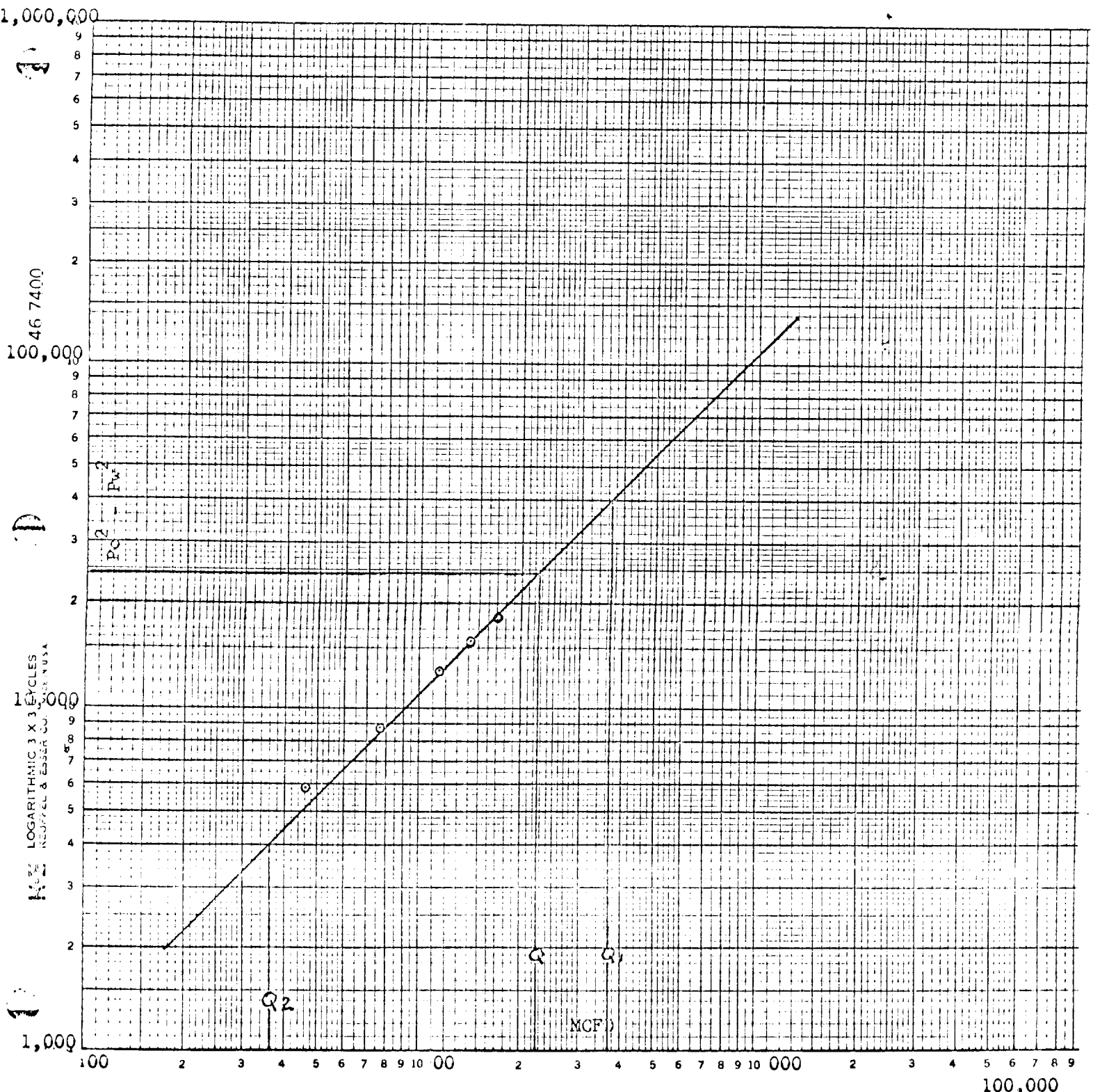
$P_c = 4958.2$ $P_c^2 = 24584$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.9527$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9527$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²				
1		4333.2	18776	5808				
2		3979.2	15834	8750				
3		3463.2	11994	12590				
4		3074.2	9451	15133				
5		2602.2	6787	17797				

$AOF = C \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2279$					Absolute Open Flow 2279 Mcfd @ 15.025		Angle of Slope @ 45		Slope, n 1	
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Remarks: PW Substituted for Pt - Measured with Amerada Instrument No. 40091 - 0-6000#
Element - 3rd Rate used for Calculations

Approved By Commission:	Conducted By: Spruell	Calculated By: Spruell	Checked By: Richburg
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TEST V. BASS
 Big Lady Unit No. 72
 Absolute Open Flow Test
 7-13-79



$$Q_1 = 3620$$

$$\text{Log } Q_1 = 3.55871$$

$$Q_2 = 362$$

$$\text{Log } Q_2 = 2.55871$$

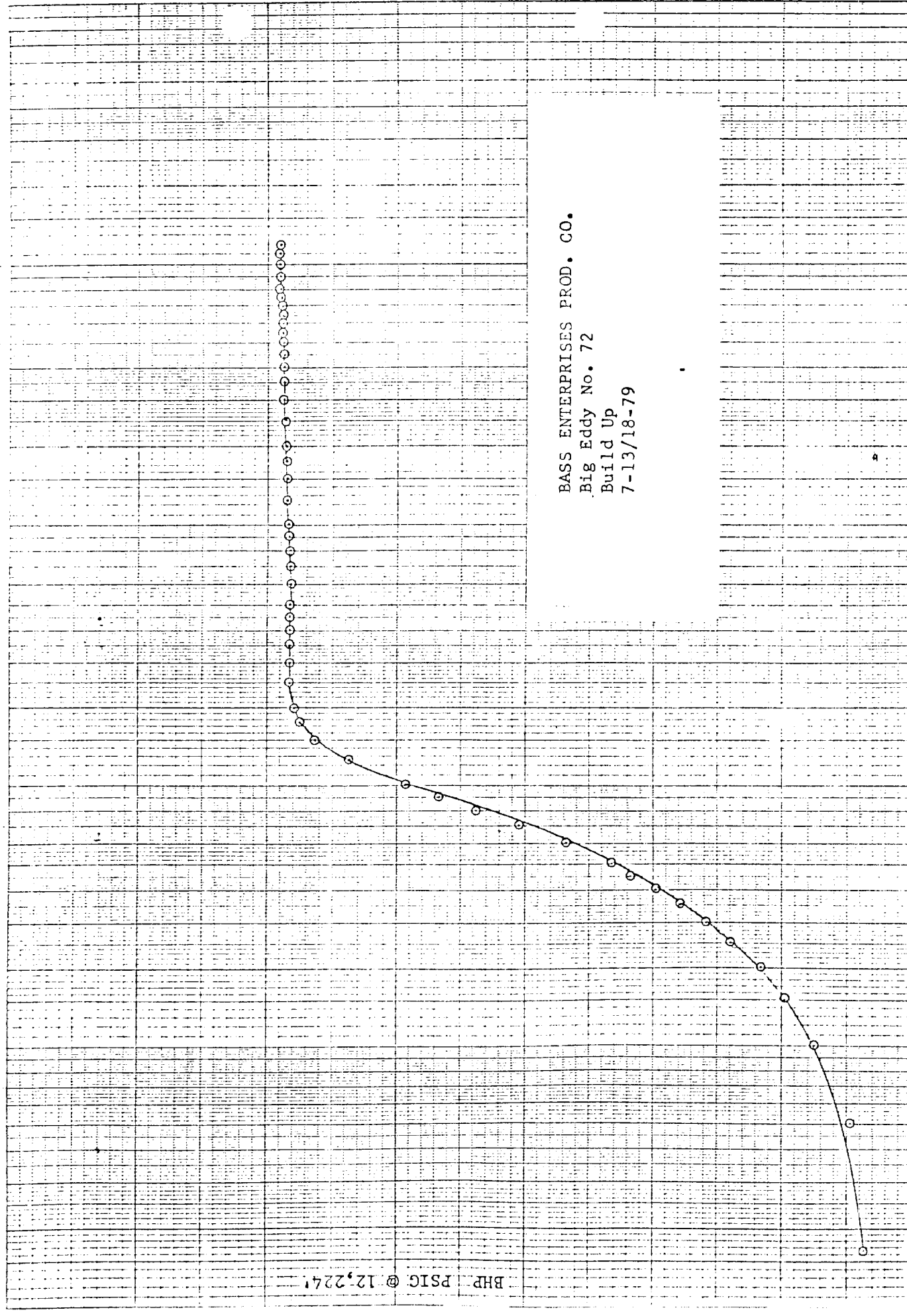
$$N = 1.0$$

$$Q = 2279 \text{ MCFD}$$

KEE SEMI-LOGARITHMIC 5 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 6210

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0.009
0.008
0.007
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0.005
0.004
0.003
0.002
0.001



BHP PSIG @ 12,224'

BASS ENTERPRISES PROD. CO.
Big Eddy No. 72
Build Up
7-13/18-79

LOG CUMULATIVE TIME: HOURS