

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT A ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-20-78		JUL - 6 1978	
Company Perry R. Bass ✓		Operator Natural Gas Pipeline Co.		O. C. C.	
Well Name Undesignated <i>Festo Deane Morrow</i>		Location Morrow		Unit ARTESIA, OFFICE Big Eddy Unit	
Completion Date 8-16-77		Total Depth 12130		Elevation 3208 KB Big Eddy Unit	
Size 5-1/2"	Wt. 17	Set At 11860	From 11639	To 11647	Well No. 53
Tripping Size 2-3/8"	Wt. 4.7#	Set At 11685	From To		Unit Sec. Twp. Rge. G 8 21-S 28-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 11619		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 188 • 11640	Mean Annual Temp. °F 68	Hard. Press. - P _g 13.2	State New Mexico
L	H	G _g .63	% CO ₂ 0	% H ₂ 0	% H ₂ S 0
Prover		Meter Run 3.068		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
51							3665	72	Packer in		60 min
1	3.068	1.125		539	1.0	77	3366	72	Well		60 min
2	3.068	1.125		539	6.13	74	2575	73			60 min
3	3.068	1.125		547	9.25	72	1967	73			60 min
4	3.068	1.125		547	11.05	72	1351				
5											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. °F	Gravity Factor F _g	Super. Comp. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	6.095	23.50	552.2	.9840	1.260	1.049	186
2	6.095	58.18	552.2	.9868	1.260	1.049	463
3	6.095	71.99	560.2	.9887	1.260	1.051	574
4	6.095	78.68	560.2	.9887	1.260	1.051	628
5							

NO.	P ₁	Temp. °R	T ₁	Z	Gas-Liquid Ratio	Grav. of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.82	537	1.46	.908	77 to 1	52	.63	XXXXXX	670	368
2	.82	534	1.45	.908				XXXXXX		
3	.84	532	1.45	.906						
4	.84	532	1.45	.906						
5										

NO.	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆
1		4460.2	19893			3914
2		3377.2	11405			12402
3		2672.2	7141			16666
4		1874.2	3513			20294
5						

$$(1) \frac{P_6^2}{P_1^2 - P_2^2} = 1.4285$$

$$\left[\frac{P_6^2}{P_1^2 - P_2^2} \right]^n = 1.3286$$

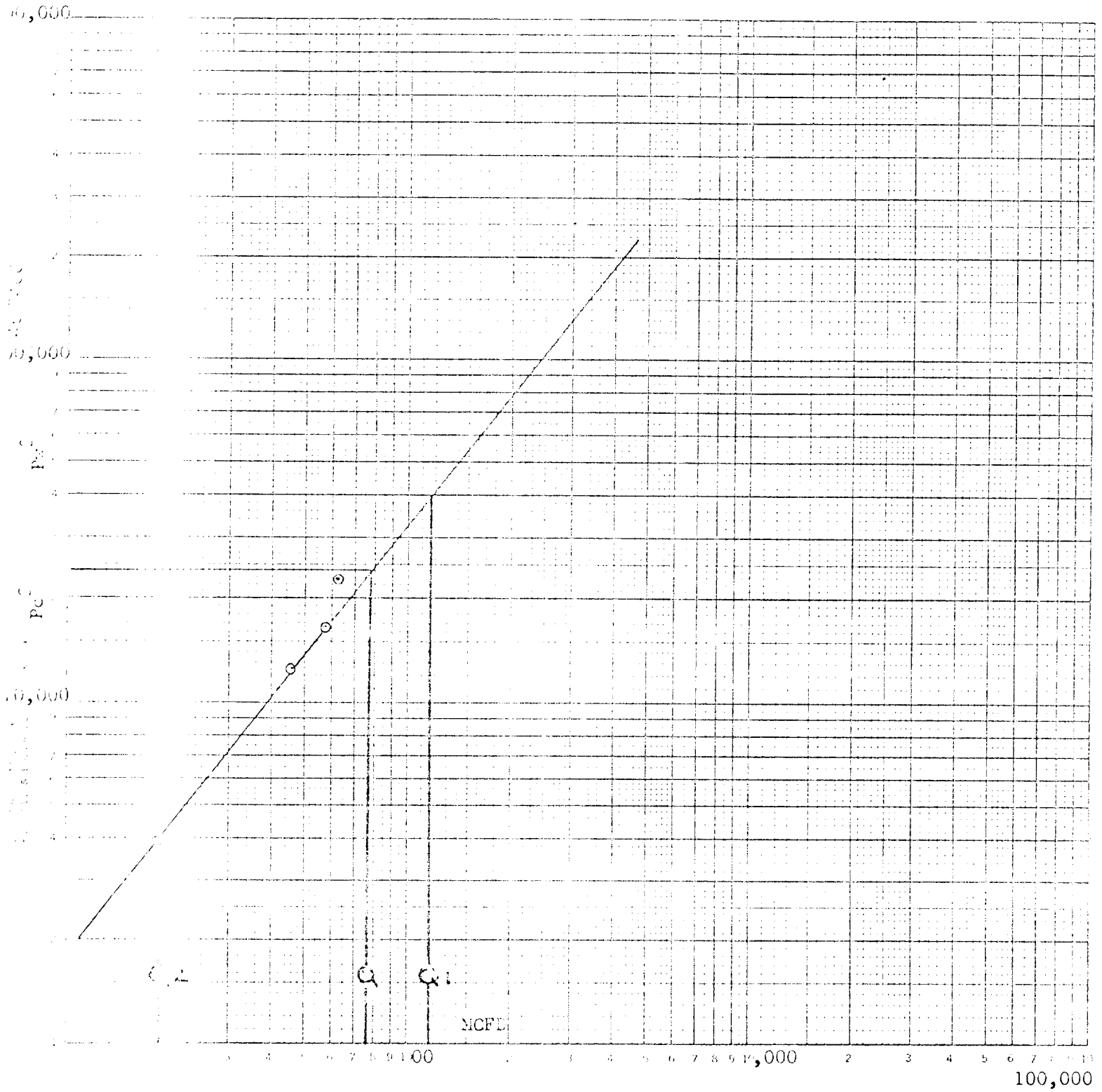
$$\left[\frac{P_6^2}{P_1^2 - P_2^2} \right]^n = 763$$

Vis. Rate (per Flow)	763	Angle of Slope	51.5	Slope, n	.7968
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Remarks: PW substituted for PT measured with Amerada Instrument 35745 - 3rd rate used for calculations

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Pyle	John Spruell	E. L. Wallace

Kerry K. Bass
 , Lady No. 53
 Absolute Open Flow Test
 6-20-78



$$Q_1 = 1165$$

$$\text{Log } Q_1 = 3.06633$$

$$Q_2 = 186$$

$$\text{Log } Q_2 = 2.26951$$

$$N = .7968$$

$$Q = 762 \text{ MCFD}$$



JOHN KUYKENDALL WIRELINE SERVICE CO., INC.
P. O. Box 184 / A/C 915 337-5241 / ODESSA, TEXAS 79760

OPEN FLOW PRODUCTION DATA

Company Barry R. Bass ~~Barry Enterprises Production Co.~~

Field

Well Big Eddy No. 53 Pay Upper Morrow

S.G. (Liquid) S. G. (Gas) .63

Meter Run 3.068 Orifice Size 1.125 Coefficient of Orifice 6.095

WELL HEAD INFO.				SEPARATOR INFO.			METER RUN			FLUID MEASUREMENTS				
Date	Time	IBG Pres.	CSG Pres.	Temp.	Temp.	Choke	Pres.	Dif.	MCFD Volume	Inches	Inches Per Hr.	BBLS Per Hr.	BBLS Per Day	BBLS Per MMCF
6-20-78	02:15	3665	opened on 1st Rate			6/64				2"				
	09:45	3234		71	76	6/64	539	2.0	264					
	10:15	3366		72	77	6/64	539	1.0	186	2"	.0	.0		
	10:15		opened on 2nd Rate			8/64								
	10:45	2782		72	74	8/64	539	9.25	568					
	11:15	2575		72	74	8/64	539	6.13	463	2 1/8	.125	.17		
	11:15		opened on 3rd Rate			10/64								
	11:45	2132		73	72	10/64	547	11.5	642					
	12:15	1967		73	72	10/64	547	9.25	575	2 1/2	.375	.53		
	12:45		opened on 4th Rate			12/64								
	12:45	1522		73	72	12/64	547	13.52	696					
	13:15	1351		73	72	12/64	547	11.05	629	2 3/4	.250	.35		