

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

File # 122 Form C-122 Revised 9-1-65
RECEIVED

MAY - 5 1980

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 3-18-80	
Company Perry R. Bass		Connection Natural Gas Pipeline Company of America	
Field Undesignated		Formation Morrow	
Completion Date March 18, 1980		Test Depth 12,500'	
Casing Size 5 1/2"		Set At 12,500'	
Casing Weight 17#		Perforations From 11,984' To 12,097'	
Tubing Size 2 3/8"		Set At 11,900'	
Tubing Weight 4.7#		Perforations From Open To Ended	
Type Well - Single - Bradenhead - G.O. or G.O. Multiple Single		Packer Set At 11,900'	
Producing Thru Tubing		Reservoir Temp. °F 161 ^a 11,850	
Mean Annual Temp. °F 13.2		Barrel Production - P ₂ 13.2	
L 11,900		H 603	
% CO ₂ .49		% N ₂ .94	
% H ₂ S Trace		Provet X	
Meter Run X		County Eddy	
State New Mexico		Unit Big Eddy Unit	
Well No. 77		Sec. 9	
Twp. 22S		Rge. 28E	

NO.	Provet Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							4115	64			
1.	4" x .750"			420	11	82	3985	58			1 hr
2.	4" x .750"			425	22	86	3922	60			1 hr
3.	4" x 1.500"			480	8	70	3522	62			1 hr
4.	4" x 1.500"			480	19	85	3237	62			1 hr
5.	4" x 1.500"			480	29	80	2815	58			1.75 hr

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w F_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1	2.661	69.030	433.2	.9795	1.288	1.032	239
2	2.661	98.186	438.2	.9759	1.288	1.031	339
3	10.84	62.814	493.2	.9905	1.288	1.040	903
4	10.84	96.803	493.2	.9768	1.288	1.035	1,366
5	10.84	119.594	493.2	.9813	1.288	1.038	1,701

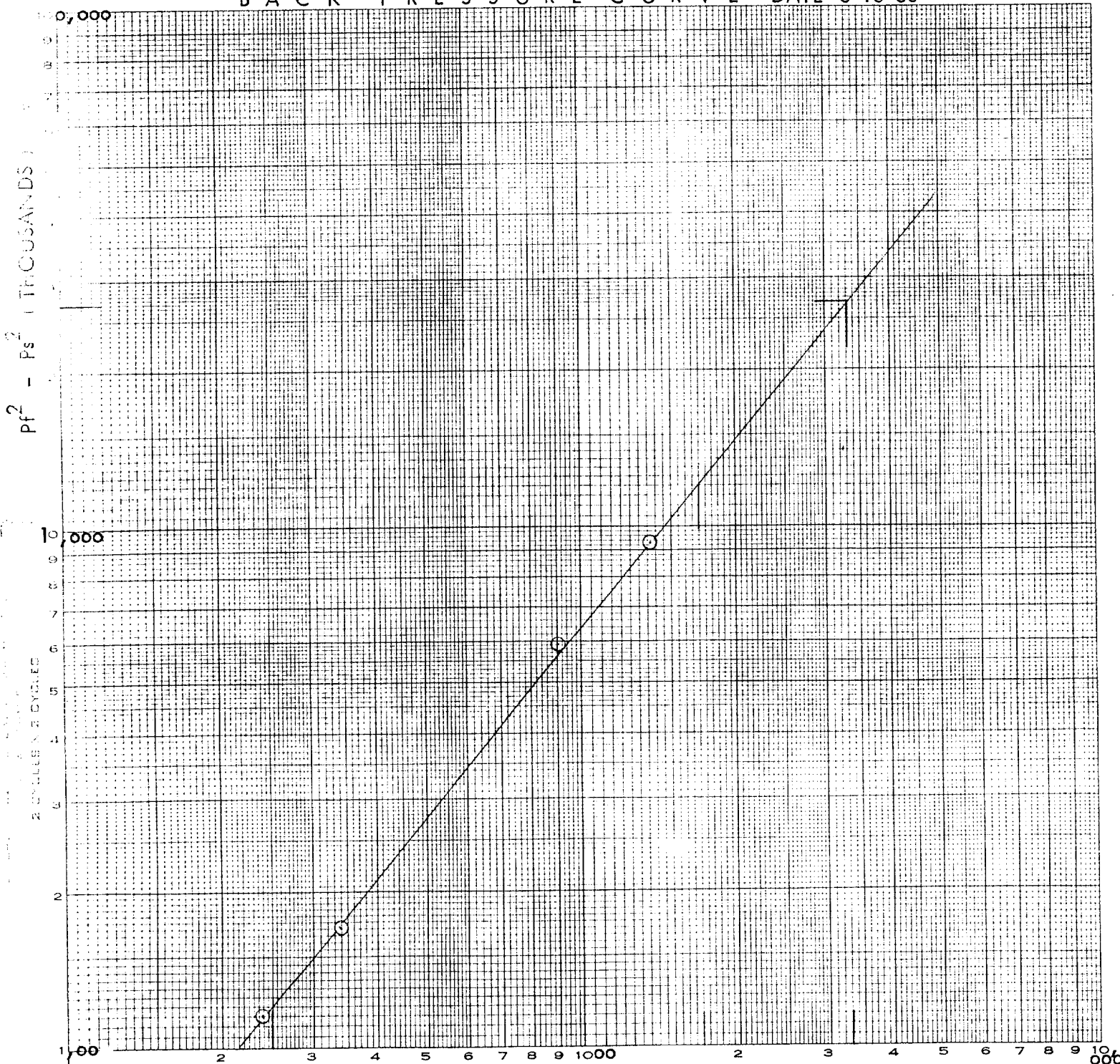
NO.	P ₁	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	None Produced	Specific Gravity Separator Gas	Critical Pressure	Critical Temperature
1	.647	542	1.527	.939				.603	670	395
2	.654	546	1.538	.941						
3	.736	530	1.493	.924						
4	.736	545	1.535	.933						
5	.736	540	1.521	.929						

NO.	P _w	P _w ²	P _w ³	P _w ² - P _w	(1) $\frac{P_w^2}{P_w^2 - P_w}$	(2) $\left[\frac{P_w^2}{P_w^2 - P_w} \right]^n$
1	5079.2	25798	1151		26,949	2.4267
2	5023.2	25233	1716		9,291	
3	4586.2	21033	5916			
4	4202.2	17658	9291			
5	3709.2	13758	13191			

Actual Open Flow	3,315	M-H-R 15-025	Actual Slope P	50°	Slope P	.8325
Remarks: Test run by Tom Hansen Co., Inc.						
Approved By Commission:	Conducted By:	Checked by:				

LEASE Jig Eddy Unit WELL 77
 FORMATION Morrow
 COUNTY Eddy STATE New Mexico

BACK PRESSURE CURVE DATE 3-18-80



Q in MCF per DAY

0 = 50°
 n = .8325
 AOF = 3,315