

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Well No. 1-20-81		Date FEB 23 1981	
Company PERRY R. BASS ✓				Connection AIR		Well O. C. O.	
Field EAST CARLSBAD				Formation ATOKA		Well C	
Completion Date 1-17-81		Total Depth 12108		Flow Line Size 11450		Elevation 3131 GL	
Csg. Size 5 1/2		Wt. 17#		Set At 12024		Perforations From 10990 To 11372	
Tq. Size 2 3/8		Wt. n/80		Set At 11420		Perforations From To	
Type Well - Single - Production - G.G. or G.O. Multiple SINGLE GAS WELL				Packer Set At 10,850		County EDDY	
Producing thru TUBING		Reservoir Temp. °F 183# 10850		Mean Annual Temp. °F 60°		State NEW MEXICO	
L 10919		R 10919		Gg .5992		Prover 4"	
% CO ₂ .891		% N ₂ 1.390		% H ₂ S		Meter Run 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	
1	4 X	.500		440	2.0	58	1720				72 hrs.
2	4 X	1.000		440	2.0	49	1660				45 min.
3	4 X	1.000		450	7.0	39	1545				1 hr.
4	4 X	1.000		454	12.0	50	1220				1 hr.
5							710				

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super. Compress. Factor, F _{pv}	Rate of Flow Q, Mscf
1	1.182	30.11	453.2	1.002	1.292	1.041	48
2	4.753	30.11	453.2	1.011	1.292	1.044	195
3	4.753	56.94	463.2	1.021	1.292	1.049	375
4	4.753	74.88	467.2	1.010	1.292	1.045	485
5							

NO.	P _r	Temp. °R	T _r	Z	Gas/Liquid Hydrocarbon Ratio	Moisture
1	.68	518	1.45	.923	dry	
2	.68	509	1.42	.917		
3	.69	499	1.39	.909		
4	.70	510	1.42	.915		
5						

NO.	BHP	P _w	P _w ²	P _w ² - P _w ²
1	2186.2	1707.8	2916.5	248.6
2	2018.2	1578.4	2491.3	673.8
3	1576.2	1240.0	1537.7	1627.4
4	881.2	702.4	493.3	2671.8
5	2280.2	S.I.P.		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.185$$

$$ADP = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .540$$

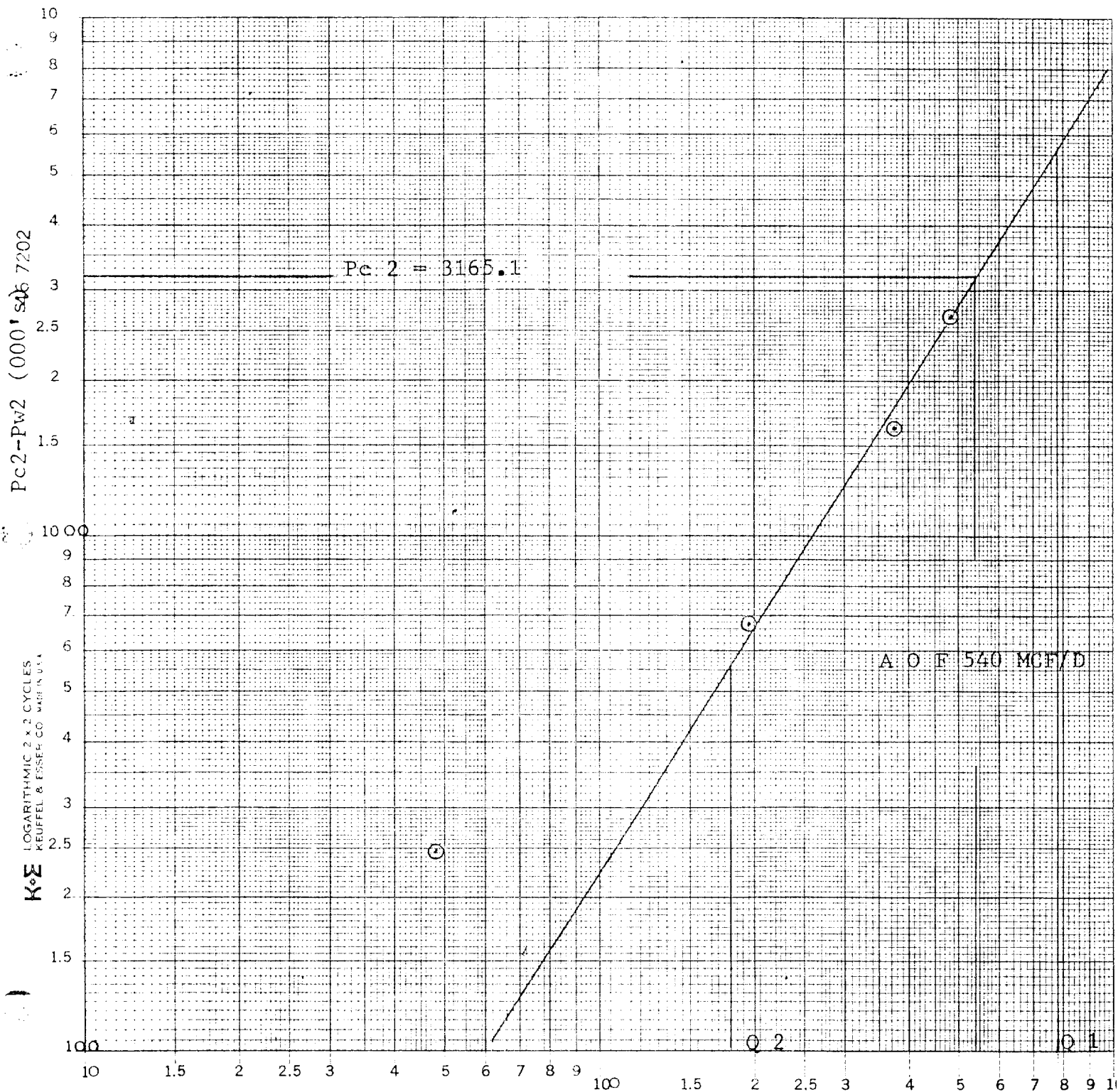
$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.114$$

Absolute Open Flow	540	Mcf @ 15.025	Angle of Slope	57.5	Slope, n	.637
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Remarks: * CALCULATED FROM BOTTOM - HOLE PRESSURE TAKEN AT 10,919 feet.

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	DAVIS SERVICES INC.	RICK PAGAN	

COMPANY : PERRY R. BASS
 LEASE : BIG EDDY UN
 WELL NO. : # 65
 UNIT : C /sec.31/twp.21s/rge.28e
 COUNTY : EDDY
 STATE : NEW MEXICO
 DATE : JANUARY 20,1981



$Q = \text{MCF / DAY}$
 $Q 1 = 780$; $\text{LOG OF } Q 1 = 2.892095$
 $Q 2 = 180$; $\text{LOG OF } Q 2 = 2.255273$
 $N = .637$
 $\theta = 57.5^\circ$