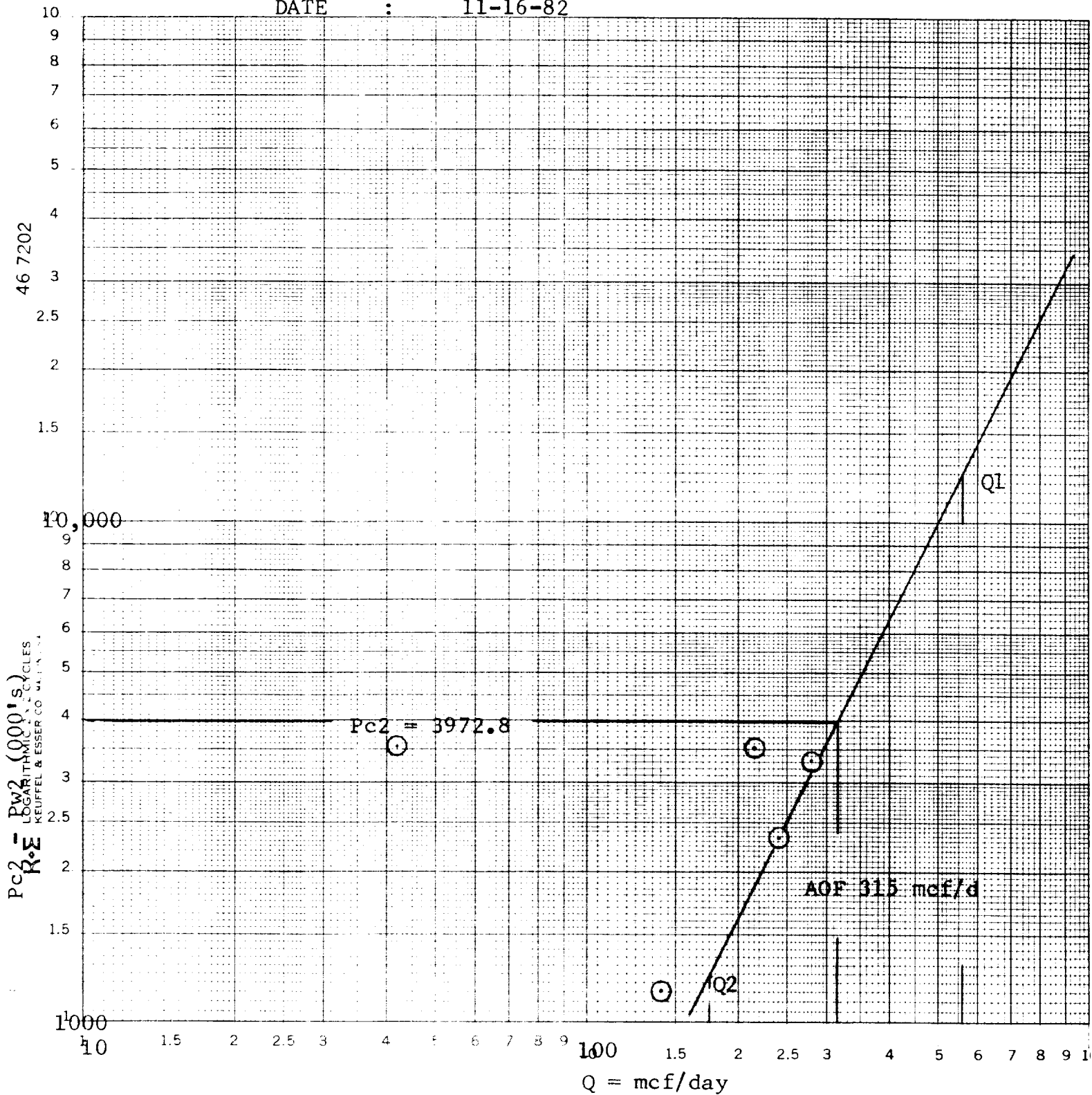


Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11/16/82		NOV 24 1982							
Company Perry R. Bass			Connection Air		O. C. D. ARTESIA, OFFICE						
From Hand			Formation Middle Morrow								
Completion Date 11/18/82		Total Length 13447-13220		Elevation 3409GL							
Casing Size 5 1/2 liner 17		Set At 13447		Perforations From 12918 To 13066							
Tub. Size 2 3/8		Set At 12865		Perforations To							
Type well - Single - Production - G.G. or G.O. Multiple Single				Packer Set At 12865							
Producing Thru Tbg.		Reservoir Temp. °F 203 @ 12865		Mean Annual Temp. °F 60							
L 12865		H 12865		Baro. Press. - P _a 13.2							
Gg .600		% CO ₂		% H ₂ S							
Prover		Meter Run 4"		Feet Flg.							
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	Duration of Flow
1.	4 X 1.000			510	1.0	92	1500				1 hr
2.	4 X 1.000			510	3.0	100	1020				1 hr
3.	4 X 1.000			510	4.0	100	560				1 hr
4.	4 X .500			380	50.0	86	381				1 hr
5.	4 X .500			360	2.0	82	370				2 hr
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mgd				
1.	4.753	22.87	523.2	.9706	1.291	1.038	141				
2.	4.753	39.62	523.2	.9636	1.291	1.035	242				
3.	4.753	45.75	523.2	.9636	1.291	1.035	280				
4.	1.182	140.21	393.2	.9759	1.291	1.029	215				
5.	1.182	27.32	373.2	.9795	1.291	1.029	42				
dry											
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.						
1.	.78	552	1.54	.929	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2.	.78	560	1.56	.933	Specific Gravity Separator Gas .600 X X X X X X X X						
3.	.78	560	1.56	.933	Specific Gravity Flowing Fluid X X X X X						
4.	.59	546	1.53	.944	Critical Pressure 671 P.S.I.A. P.S.I.A.						
5.	.56	542	1.51	.944	Critical Temperature 358 R R						
$P_c = 1993.2$ $P_c^2 = 3972.8$ (1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.693$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.301$											
NO.	BHP	P _w	P _w ²	P _c ² - P _w ²	$ADP = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .315$						
1	2247.2	1678.0	2815.9	1156.9							
2	1676.2	1275.4	1626.7	2346.1							
3	1042.2	801.8	642.8	3330.0							
4	880.2	679.0	461.1	3511.7							
5	861.2	664.7	441.9	3530.9							
2777.2 S.I.P. 315 Mgd @ 15.025 Angle of Slope 63.5° Slope, n .500											
Remarks:											
Approved By: _____		Conducted By: _____		Calculated By: _____		Checked By: _____					
Davis Services, Inc. Rick Pagan											

COMPANY : Perry R. Bass
 LEASE : Big Eddy Unit
 WELL NO.: 97
 UNIT : Sec. 33/ twp. 21s/ rge. 28e
 COUNTY : Eddy
 STATE : New Mexico
 DATE : 11-16-82



$$Q1 = \text{Log } 560 = 2.748188$$

$$Q2 = \text{Log } 177 = 2.248188$$

$$N = .500$$

$$\theta = 63.5^\circ$$

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (RX or Pw)

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (RX or Ps)

COMPANY Perry R Bass LEASE Big Eddy Unit WELL NO. 97 DATE 11/16/82

LOCATION: Unit 33 Section 33 Township 21s Range 28e

L 12865 H 12865 L/H 1.000 G .600 % CO₂ _____ % N₂ _____ % H₂S _____

GH 7719 P_{cr} 671 T_{cr} 358

LINE	1st Rate	2	3	4	5	6	7	8
1		534	534	534	534	534	534	534
2		663	663	663	663	663	663	663
3		598.5	598.5	598.5	598.5	598.5	598.5	598.5
4		.819	.828	.840	.885	.922	.900	.932
5		490.2	495.6	502.7	529.7	551.8	538.7	557.8
6		15.748	15.576	15.354	14.573	13.988	14.330	13.838
7		1.805	1.793	1.779	1.727	1.690	1.712	1.680
8		2247.2	2247.2	1676.2	1042.2	1042.2	880.2	880.2
9		5049.9	5049.9	2809.6	2809.6	1086.2	774.8	774.8
10		2797.8	2815.9	1579.8	1626.7	629.3	452.7	461.1
11		1672.7	1678.0*	1256.9	1275.4*	793.3	672.8	679.0*
12		1959.9	1962.6	1466.5	1475.8	917.7	776.5	779.6
13		2.92	2.93	2.19	2.20	1.37	1.16	1.16
14		1.67	1.67	1.67	1.67	1.67	1.67	1.67
15		.828	.827	.885	.885	.922	.932	.932

3rd Rate

2nd Rate

4th Rate

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_{wh} or P_w)

Form C-12-F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_{bh} or P_s)

COMPANY Perry R. Bass LEASE Big Eddy Unit WELL NO. 97 DATE 11/16/82

LOCATION: Unit 33 Section 33 Township 21s Range 28e

L 12865 H 12865 L/H 1.000 G .600 % CO₂ % N₂ % H₂S

GH 7719 P_{cr} 671 T_{cr} 358

5th Rate

LINE	1	2	3	4	5	6	7	8
1	$T_w(W.H. \circ R)$	534						
2	$T_c(B.H. \circ R)$	663						
3	$T = \frac{T_w + T_c}{2}$	598.5						
4	Z (Est.)	.932						
5	TZ	557.8						
6	GH/TZ	13.838						
7	e^S (Table XIV)	1.680						
8	P_f or P_s	861.2						
9	P_f^2 or P_s^2	741.7						
10	$P_c^2 = P_f^2 / e^S$ or $P_w^2 = P_s^2 / e^S$	441.4						
11	P_c or P_w	664.4						
12	$P = \frac{P_w + P_s}{2}$ or $(\frac{P_c + P_f}{2})$	762.8						
13	$P_f = (P / P_{cr})$	1.14						
14	$T_f = (T / T_{cr})$	1.67						
15	Z (Table XI)	.934						