Form C-122
Revised 9-1-[illegible]

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

RECEIVED

NOV 13 1981

O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial   [ ] Annual   [ ] Special   Test Date: 10/20/81

Company	PERRY R. PASS
Pool	~~Wildcat~~ Southwest Indian Flats ~~Morrow~~
Formation	Air / ~~Middle~~ Morrow
Unit	Big Eddy Unit
Completion Date	Oct. 20, 1981
Total Depth	12729
Plug Back TD	12 65
Farm or Lease Name	Big Eddy Unit
Csg. Size	$5\frac{1}{2}$
Wt.	17#
Set At	12729
Perforations	12191 – 12[illegible]
Well No.	82
Tbg. Size	2 3/8
Wt.	4.7#
Set At	12140
Unit / Sec. / Twp. / Rge.	Z / 10 / 22s / 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Single Gas
Packer Set At	12140
County	Eddy
Producing Thru	Tbg.
Reservoir Temp. °F	196 @ 12172
Mean Annual Temp. °F	60
Baro. Press.	13.2
State	New Mexico
L	*12172
H	12172
Gg	.5961
% CO₂	2.152
% N₂	.802
Meter Run	4"
Taps	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Temp. °F	Casing Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					4120				72 hrs.
1.	4 X 1.250	450	6.5	97	3970				1 hrs.
2.	4 X 1.250	455	16.0	102	3820				1 hrs.
3.	4 X 1.250	475	47.0	91	3415				1 hrs.
4.	4 X 1.250	720	64.0	100	2925				1 hrs.
5.	4 X 1.750	470	33.0	93	2620				4 hrs.

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor F_t	Gravity Factor F_g	Super Compress. Factor, F_{pv}	Rate of Flow Q, Mcfd
1	7.469	54.87	463.2	.9662	1.29[illegible]	1.030	528
2	7.469	86.55	468.2	.9619	1.29[illegible]	1.030	829
3	7.469	151.43	488.2	.9715	1.2[illegible]	1.034	1472
4	7.469	216.62	733.2	.96[illegible]6	1.2[illegible]	1.047	21[illegible]4
5	14.93	126.28	483.2	.9653	[illegible]	1.031	2430

NO.	P_r	Temp. °R	T_r	Z
1	.68	557	1.57	.943
2.	.69	562	1.58	.943
3.	.72	551	1.55	.936
4.	1.08	560	1.58	.913
5	.71	558	1.57	.940

Gas Liquid Hydrocarbon Ratio ______ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ______ Deg.
Specific Gravity Separator Gas ______ XXXXXXXXX
Specific Gravity Flowing Fluid ______
Critical Pressure 679 P.S.I.A. ______ P.S.I.A.
Critical Temperature 355 R ______ R

P_c 4133.2 P_c^2 17083.3

NO	BHP$_f$	P_w	P_w^2	$P_c^2 - P_w^2$
1*	5014.2	3937.6	15504.6	1578.7
2	4830.2	3781.3	14298.3	2785.0
3	4356.2	3384.6	11455.3	5628.0
4	3792.2	2921.9	8537.0	8546.3
5	3614.2	2778.1	7717.6	9365.7

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.[illegible]   (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.786

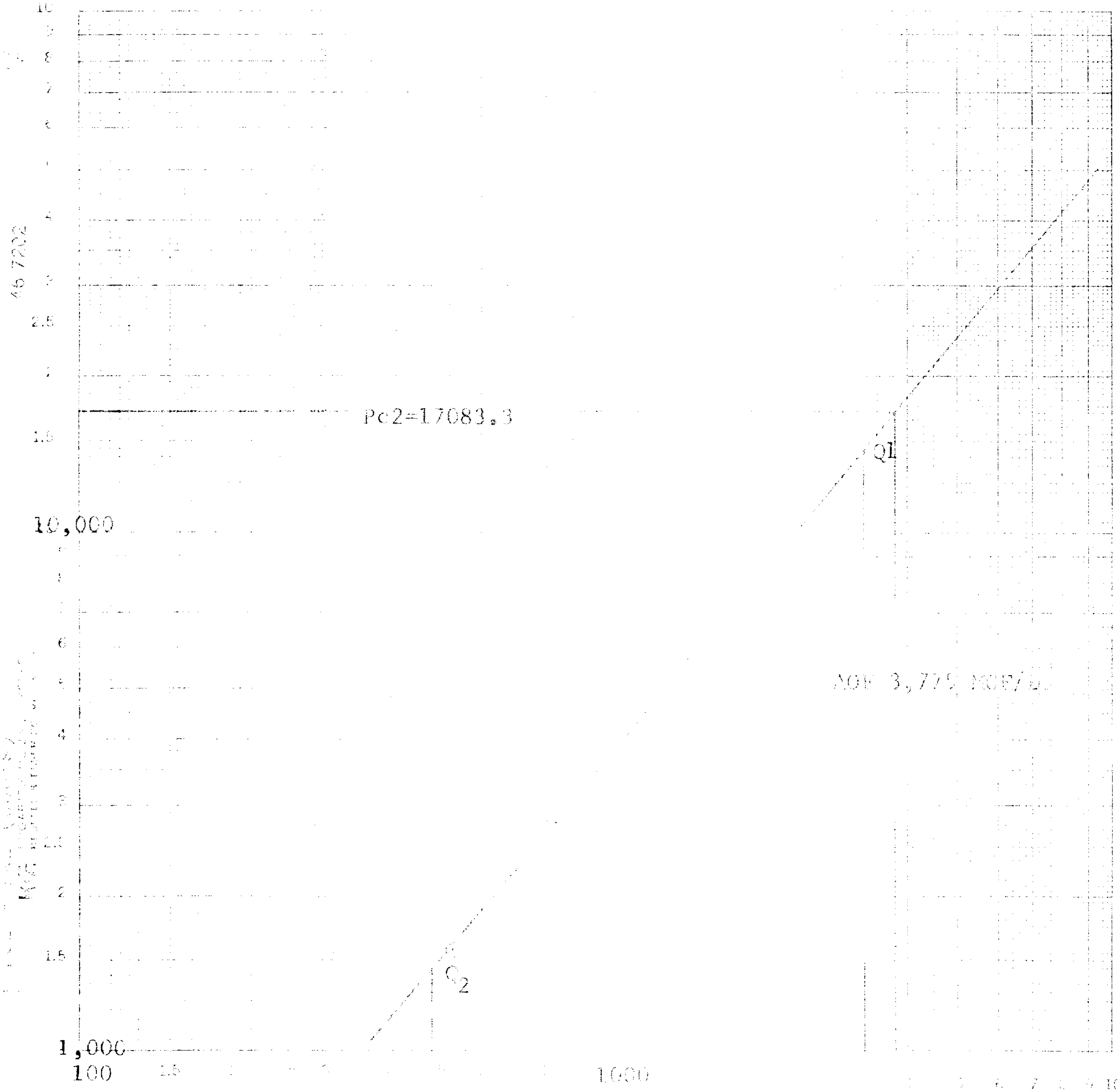
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 3,775

5188.2 S.I.P.
Absolute Open Flow 3,775 Mcfd @ 15.025   Angle of Slope θ 50°   Slope, n .837

Remarks: * Pressure obtained from a bottom-hole instrument set at 12172 ft.
1 bbl. of H_2O was produced during the test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pugh	

COMPANY : PERRY R. BA[illegible]
LEASE : BIG EDDY [illegible]
WELL NO. : [illegible]
UNIT : Sec.10/Twp.[illegible] [illegible]28E
COUNTY : [illegible]
STATE : NEW MEXICO
DATE : 10/20/81



Q = MCF [illegible]
Q1 = [illegible]3 [illegible]; Log of [illegible] [illegible]8514
Q2 = [illegible]4 [illegible]; Log of [illegible] [illegible]242

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (P_c or P_s)

Form C-122F
Adopted 9-1-65

COMPANY Bass Enterprises LEASE Big Eddy Unit WELL NO. 82 DATE 10-20-81

LOCATION: Unit _____ Section 10 Township 22s Range 28E

L 12172 H 12172 L/H 1.000 G .5961 % CO_2 2.152 % N_2 .802 % H_2S _____

GH 7256 P_{cr} 679 (TABLE IX & X) T_{cr} 355 (TABLE IX & X)

		1st Rate		2nd Rate		3rd Rate		4th Rate	
LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	534	534	534	534	534	534	534	534
2	T_s(B.H. °R)	656	656	656	656	656	656	656	656
3	$T=(\frac{T_w + T_s}{2})$	595	595	595	595	595	595	595	595
4	Z (Est.)	.984	.946	.970	.934	.937	.906	.900	.877
5	TZ	585.5	562.9	577.2	555.7	557.5	539.1	535.5	521.8
6	GH/TZ	12.393	12.891	12.572	13.057	13.015	13.460	13.550	13.905
7	e^s(Table XIV)	1.592	1.622	1.602	1.632	1.629	1.657	1.662	1.684
8	P_f or P_s	5014.2	5014.2	4830.2	4830.2	4356.2	4356.2	3792.2	3792.2
9	P_f^2 or P_s^2	25142.2	25142.2	23330.8	23330.8	18976.5	18976.5	14380.8	14380.8
10	$P_c^2 = P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	15796.8	15504.6	14560.7	14298.3	11648.0	11455.3	8651.8	8537.4
11	P_c or P_w	3974.5	*3937.6	3815.8	*3781.3	3412.4	*3384.6	2941.4	*2921.9
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	4494.4	4475.9	4323.0	4305.8	3884.6	3870.4	3366.8	3357.0
13	$P_r = (P/P_{cr})$	6.62	6.59	6.37	6.34	5.72	5.70	4.96	4.94
14	$T_r = (T/T_{cr})$	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
15	Z (Table XI)	.946	.945	.934	.932	.906	.905	.877	.877

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

FROM KNOWN BOTTOM HOLE PRESSURE (P_c or P_s)

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5th Rate

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	534	534						
2	T_s(B.H. °R)	656	656						
3	$T=(\frac{T_w + T_s}{2})$	595	595						
4	Z (Est.)	.890	.869						
5	TZ	529.6	517.1						
6	GH/TZ	13.702	14.033						
7	e^S(Table XIV)	1.672	1.693						
8	P_f or P_s	3614.2	3614.2						
9	P_f^2 or P_s^2	13062.4	13062.4						
10	$P_c^2 - P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	7814.0	7717.6						
11	P_c or P_w	2795.4	*2778.1						
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	3204.8	3196.1						
13	$P_r = (P/P_{cr})$	4.72	4.71						
14	$T_r = (T/T_{cr})$	1.68	1.68						
15	Z (Table XI)	.869	.869						

NEW-TEX LAB
P. O. BOX 1161
HOBBS, N.M. 88240

No._____
Run No._____
Date of Run_____
Date Secured_____

CERTIFICATE OF ANALYSIS

A Sample of_____
Secured from_____
At_____ Secured by_____
Time_____ Date_____
Sampling conditions_____ Press_____
Temp._____
Station No._____

FRACTIONAL ANALYSIS

Percentage Composition

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide			
Air			
Nitrogen			
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane			
Ethane			
Propane			
Butanes			
Iso-Butane			
N-Butane			
Pentanes			
Iso-Pentane			
N-Pentane			
Hexanes			
Heptanes			
Octanes			
TOTAL			

Calc. Sp. Gr.—_____
Calc. A.P.I.—_____
Calc. Vapor Press.—_____ PSIA
Sp. Gr._____
Mol. Wt._____

LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M. _____
Butanes Calc. G.P.M. _____
Pentanes Plus. G.P.M. _____
Ethane Calc G.P.M. _____
____ # RVP Gasoline G.P.M. _____

B.T.U./Cu. Ft. @ 14.696 P.S.I.A.
Dry Basis _____
Wet Basis _____

Sulfur Analysis by Titration
Gr./100 Cu. Ft.
Hydrogen Sulfide _____
Mercaptans _____
Sulfides _____
Residual Sulfur _____
Total Sulfur _____

Run by_____ Checked by_____ Approved by_____

Additional Data and Remarks