

N. MEXICO OIL CONSERVATION COMM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Form C-122
Rev 9-1-65

MAR 10 1983

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 3/11/83		O. C. D.	
Company PERRY R. BASS		Connection AIR		ARTESIA, OFFICE	
Pool <i>Wildcat Well</i>		Formation WOLFCAMP		Unit G	
Completion Date 3/9/83		Total Length 12721		Plug Back To 11691	
Elevation 3308.3 GL		Form or Lease Name BIG EDDY UNIT		Well No. 84	
Cog. Size 5 1/2	Wt. 17	Set At 11691	Perforations: From 10041 To 10149		Unit Sec. Twp. Rge. G 18 21S 29E
Teg. Size 2 3/8	Wt.	Set At 9930	Perforations: From To		County EDDY
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE GAS				State NEW MEXICO	
Producing Thru TBG.		Reservoir Temp. °F 173 @ 9915		Mean Annual Temp. °F 60	
Baro. Press. - I _g 13.2		Packer Set At 9930		Prover 4"	
L 9915	H 9915	G _g .8432	% CO ₂ 3.238	% N ₂ 1.000	% H ₂ S 0
Motor Run 4"		Type FLG.			

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2682				34 hrs.
1.	4 X 1.000			450	3.25	70	2230				1 hr.
2.	4 X 1.000			445	10.00	110	1980				1 hr.
3.	4 X 1.000			450	23.00	88	1760				1 hr.
4.	4 X 1.000			450	33.00	98	1460				1 hr.
5.	4 X 1.000			450	36.00	95	940				4 hrs.

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, Mcfd
1	4.753	38.80	463.2	.9905	1.089	1.076	214
2	4.753	67.69	458.2	.9551	1.089	1.056	353
3	4.753	103.22	463.2	.9741	1.089	1.067	555
4	4.753	123.63	463.2	.9653	1.089	1.062	656
5	4.753	129.13	463.2	.9680	1.089	1.064	688

NO.	P _i	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.69	530	1.23	.864	2.068	46.2 @ 60°	.8432	X X X X X X X X	675	430
2.	.68	570	1.33	.896				X X X X X		
3.	.69	548	1.27	.879						
4.	.69	558	1.30	.887						
5.	.69	555	1.29	.884						

NO.	BHP	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	4822.2		23253.6	2089.6	2.621	1.842
2	4539.2		20604.3	4738.9		
3	3959.2		15675.3	9667.9		
4	3524.2		12420.0	12923.2		
5	2518.2		6341.3	19001.9		

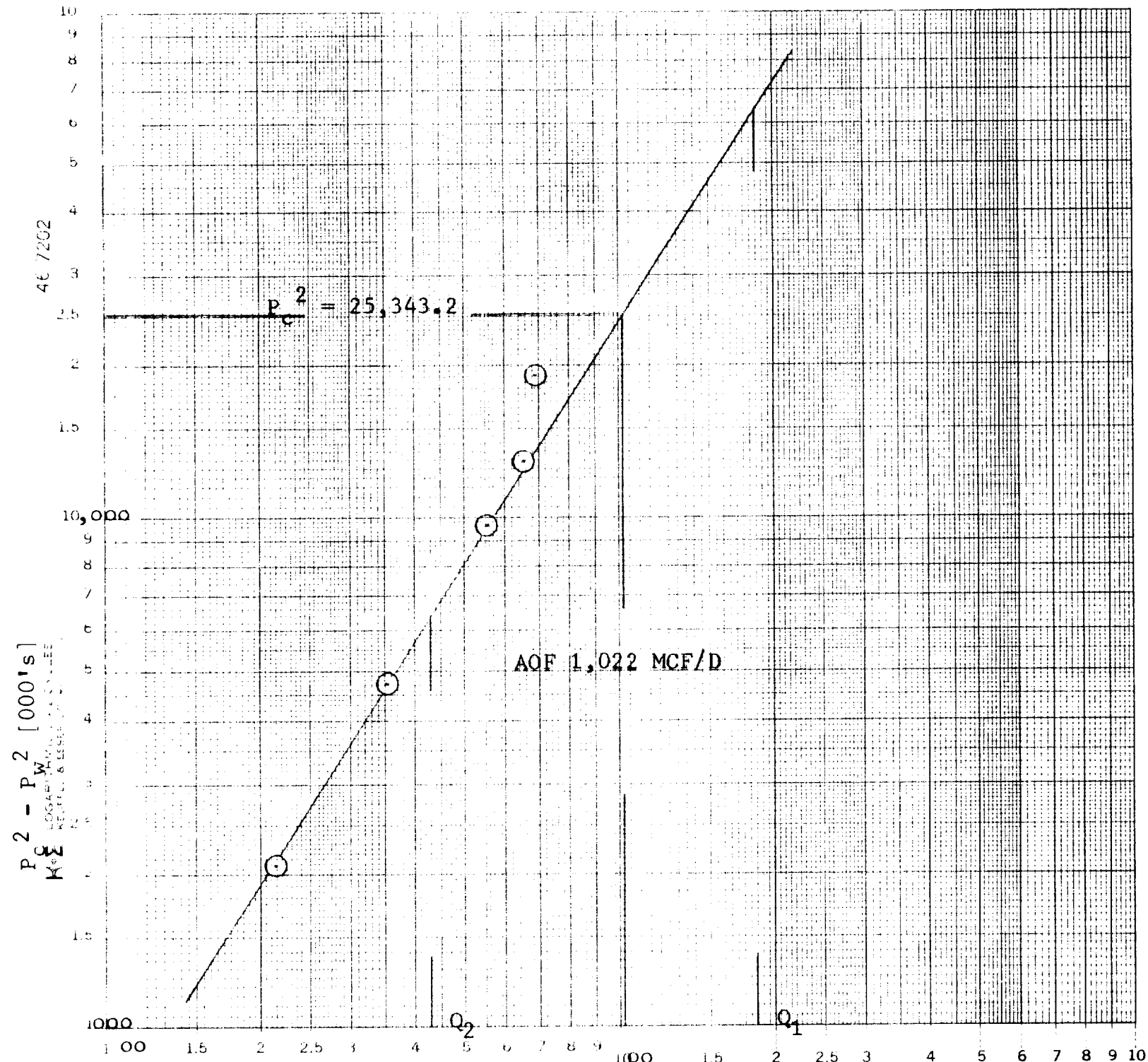
Absolute Open Flow 1.022 Mcfd @ 15.025		Angle of Slope 57.50°		Slope, n .634	
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Remarks: **Produced 91.26 bbls. of distillate during the test.**
Test calculated from bottom-hole pressures due to low GOR.

Approved By Consultant:	Conducted By: DAVIS SERVICES, INC.	Calculated By: RICK PAGAN	Checked By:
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*Post ID-2
3-25-83
Comp + BK*

COMPANY : PERRY R. BASS
 LEASE : BIG EDDY UNIT #84
 LOCATION : UNIT 6, SEC. 18, TWP. 21S, RGE 29E
 COUNTY : EDDY
 DATE : 3/11/83
 AOF : 1,022 MCF/D



$$\begin{aligned}
 Q_1 \text{ LOG } 1850 &= 3.267172 \\
 -Q_2 \text{ LOG } 430 &= 2.633468 \\
 n &= .634 \\
 \theta &= 57.5^\circ
 \end{aligned}$$

NEW-TEX LAB

PHONE 505/393-3561

P. O. BOX 1161

611 W. SNYDER

HOBBS, NEW MEXICO 88240

ANALYSIS CERTIFICATE

CLIENT: DAVIS SERVICES INC
ADDRESS: P O BOX 2033
CITY, STATE: HOBBS NM 88240

ANALYSIS NUMBER: 177
DATE OF RUN: 03/14/83
DATE SECURED: 03/11/83

SAMPLE IDENT: PERRY R BASS LEASE - BIG EDDY UNIT B4
SAMPLING PRESS: SAMPLING TEMP: 100 DEG F

REMARKS: TRAP PRESSURE 450#

***** GAS ANALYSIS *****

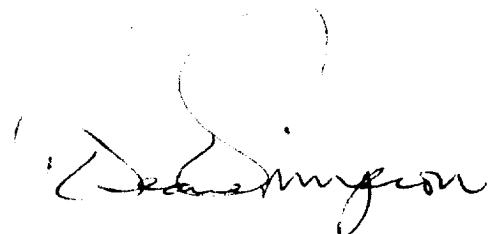
	MOLE PERCENT	GAL/ MCF
NITROGEN	1.000	
CARBON DIOXIDE	3.238	
METHANE	66.374	
ETHANE	15.475	4.127
PROPANE	8.035	2.006
ISOBUTANE	1.028	0.335
NORMAL BUTANE	2.661	0.637
ISOPENTANE	0.597	0.218
NORMAL PENTANE	0.703	0.254
HEXANES	0.365	0.150
HEPTANES PLUS	0.523	0.141
TOTAL	100.000	8.389

ETHANE GRPM	2.21	BUTANES GRPM	1.17
ETHANE GRPM	4.13	PENTANES PLUS GRPM	0.86

SPECIFIC GRAV (CALC): 0.9432
MOLE WEIGHT: 24.47

REV-B TO YOU FT	PRESSURE (PSIA)	WET	DRY
	14.696	1342	1366
	14.650	1338	1361
	14.730	1345	1369
	14.735	1345	1369

R. H. HAMILTON



NEW-TEX LAB

P. O. BOX 1161
HOBBS, N.M. 88240

CERTIFICATE OF ANALYSIS

No. _____
Run No. 0185
Date of Run 03-14-83
Date Secured 03-11-83

A Sample of Perry R. Bass - Big Eddy Unit 84
Secured from Daves Services
At Box 2033 Secured by _____
Hobbs, NM 88240 Time _____ Date _____
Sampling conditions _____ Press _____
Temp. _____ Station No. _____

FRACTIONAL ANALYSIS

Percentage Composition

	MOL %	LIQ. %	WT% G.P.M.
Carbon Dioxide	.006	.003	.003
Air			
Nitrogen	.083	.023	.025
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	.122	.052	.021
Ethane	.432	.290	.138
Propane	1.976	1.365	.927
Butanes			
Iso-Butane	.477	.392	.295
N-Butane	4.789	3.790	2.961
Pentanes			
Iso-Pentane	3.194	2.935	2.451
N-Pentane	5.343	4.860	4.100
Hexanes	4.904	5.063	5.227
Heptanes	78.674	81.227	83.852
Octanes			
TOTAL	100.000	100.000	100.000

Calc. Sp. Gr.— 0.6769 (Liquid)
Calc. A.P.I.— _____
Calc. Vapor Press.— _____ PSIA
Sp. Gr. _____
Mol. Wt. 93.33

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.F.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 R. H. Hamilton Checked by Deane Simpson Approved by Deane Simpson
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Additional Data and Remarks