

NEW MEXICO OIL AND GAS COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS
Q. C. D.
WELLS

RECEIVED

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special						Test Date 8/6/92	
Company BASS ENTERPRISES PRODUCTION CO.				Connection PIPE			
Pool INDIAN FLATS				Formation WOLFCAMP		Unit	
Completion Date 8-6-92		Total Depth 12,750'		Plug Back TD 11,365'		Elevation 3196.2' GR	
Farm or Lease Name BIG EDDY		Well No. 93		Perforations: From 0. To 0.		Unit Sec. Twp. Rge. K 36 21S 28E	
Csg. Size 5.5"	Wt. 17	d .000	Set At 12,750'	Perforations: From 0. To 0.		Well No. 93	
Tbg. Size 2.375	Wt. 4.70	d .000	Set At 10,195	Perforations: From 10,428 To 10,438		Unit Sec. Twp. Rge. K 36 21S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10,195'		County EDDY	
Producing Thru TBG		Reservoir Temp. °F 180 @ 10433.		Mean Annual Temp. °F 60.0		Baro. Press. - P _a 13.2	
State NEW MEXICO		L 10433.		H 10433.		Gg .701	
% CO ₂ 1.02		% N ₂ 1.03		% H ₂ S .00		Prover .0	
Meter Run 3.1		Taps PIPE					

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	of Flow
SI							2125.	75.			24.0
1.	3.07 x 1.000			525.	6.1	74.	1995.	80.	0.	0.	1.0
2.	3.07 x 1.000			525.	12.5	74.	1945.	80.	0.	0.	1.0
3.	3.07 x 1.000			525.	24.5	74.	1849.	80.	0.	0.	1.0
4.	3.07 x 1.000			525.	47.0	74.	1737.	80.	0.	0.	1.0
5.											

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.	5.12	57.44	538.7	.9868	1.1944	1.0578	367.
2.	5.12	82.06	538.7	.9868	1.1944	1.0578	524.
3.	5.12	114.88	538.7	.9868	1.1944	1.0578	733.
4.	5.12	159.19	538.7	.9868	1.1944	1.0578	1016.
5.							

NO.	P _t	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.	.80	534.	1.39	.894	.0	.0	.701	X X X X X X X X	670.	386.
2.	.80	534.	1.39	.894	.0	.0	.701	X X X X X X X X	670.	386.
3.	.80	534.	1.39	.894	.0	.0	.701	X X X X X X X X	670.	386.
4.	.80	534.	1.39	.894	.0	.0	.701	X X X X X X X X	670.	386.
5.										

NO.	P _t ²	P _w ²	P _w ² - P _t ²	P _t ² / (P _w ² - P _t ²)
1.	4033.	1985.	3940.	533.
2.	3835.	1936.	3750.	743.
3.	3468.	1843.	3398.	1095.
4.	3063.	1737.	3018.	1474.
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.0469$

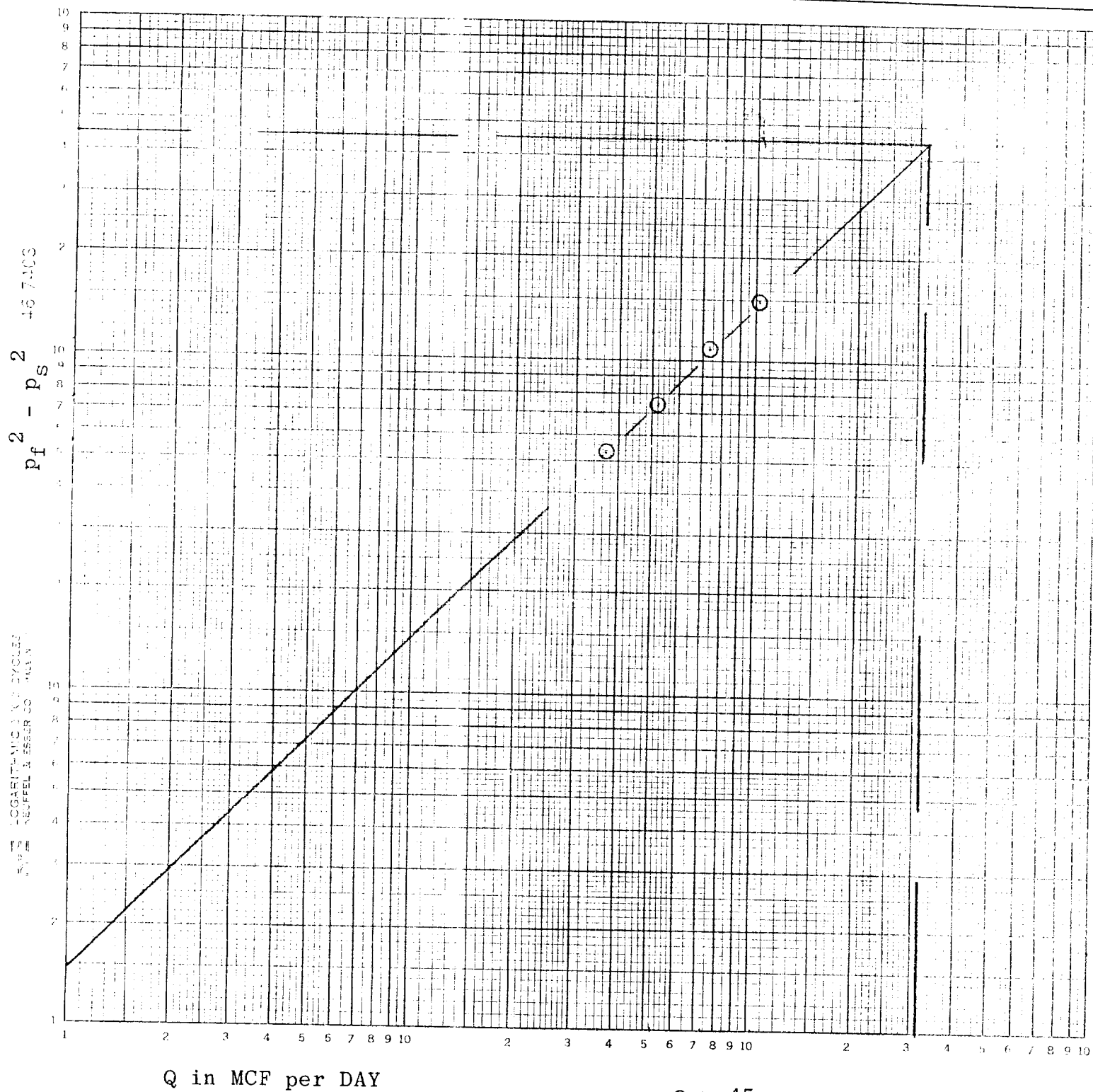
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3096.$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.0469$

Absolute Open Flow	3096.	Mcfd @ 15.025	Angle of Slope	45.0	Slope, n	1.000
Remarks:						
Approved By Commission:						
Conducted By:		Calculated By:		Checked By:		

GAS WELL
BACK PRESSURE CURVE

County EDDY Field
Operator BASS ENTERPRISES PRODUCTION CO.
Lease BIG EDDY Well # 93
Volume 3096 MCF/24 hr.
Date August 6, 1992



$$\theta = 45$$

$$N = 1.000$$

$$Q = 3096$$

PROGRAM: AOF
FILENAME: BASS
PROJECT: 1

DATE: 08-07-92
TIME: 06:15:09
PAGE: 1

INPUT DATA

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LEASE	BIG EDDY	WELL NO.93	UNIT #
LOCATION		COUNTY EDDY	STATE NW

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GENERAL INFORMATION:	DIMENSIONS AND DEPTHS:	BASIC DATA:
=====	=====	=====
DATE, MO/DAY/YR 8/ 6/92	MEASURED DEPTH, FT 10433	SHUT-IN TIME, HR. 24
METER METHOD CODE 1	TVD, FT 0	SHUT-IN WH TEMP, F 75
REPORT FORMAT CODE 21	TBG-1 LENGTH, FT 10195	BOTTOMHOLE TEMP, F 180
SLOPE OF 1-PT TEST .85	TBG-1 I.D., INCH 1.995	SHUT-IN PRESS, PSIG 2125
TYPE OF TEST: RETEST	TBG-2 LENGTH, FT 0	MEASUREMENT POINT 0
	TBG-2 I.D., INCH 0	CONDENSATE GRAVITY 0
OPTIONAL TEXAS G-10 DATA:	CASING I.D., INCH 4.892	SEPARATOR GAS GRAV .701
=====		GOR, SCF/STB 0
PRIOR AOF, MCF/D 0	OPTIONAL FOR L-10 CHARTS:	GAS DILUENTS, MOLE %:
PRIOR PF, PSIA 0	=====	CO2 1.02
(ENTER THE PRIOR 1-POINT	STATIC RANGE 1200	H2S 0
SLOPE IN SECTION ABOVE)	DIFFERENTIAL RANGE 50	N2 1.03

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ENTER DATA FOR EITHER ONE TEST, OR FOR FOUR TESTS, NOT FOR TWO OR THREE.

GAS MEASUREMENT DATA:	TEST 1	TEST 2	TEST 3	TEST 4
=====	=====	=====	=====	=====
METER-RUN LINE SIZE, INCHES	3.065	3.065	3.065	3.065
ORIFICE SIZE, INCHES	1	1	1	1
UPSTREAM PRESSURE, PSIG	6.7	6.7	6.7	6.7
DIFFERENTIAL PRESS., IN. WATER	3.5	5	7	9.7
FLOWING TEMPERATURE, DEG. F	74	74	74	74
24-HOUR FLOW COEFFICIENT				
USER-SUPPLIED FLOW RATE, MCF/D				

WELLBORE PRESSURE DATA:				
=====				
FLOW PERIOD, MINUTES	60	60	60	60
CHOKE SIZE, INCHES OR 64THS	10	11	12	13
FLOWING WELL PRESSURE, PSIG	1995	1945	1849	1737
FLOWING WELL TEMPERATURE, DEG F	80	80	80	80

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MANLEY GAS TESTING INC.
120 DOL ROAD - ODESSA, TEXAS-915-367-3024

CHARGE..... 13 - 0 - 0
TEST NUMBER.. 32146

DATE SAMPLED..... 8-6-92
DATE RUN..... 8-7-92

A SAMPLE OF GAS SAMPLE
RECEIVED FROM BASS ENTERPRISES
LOCATION MIDLAND TEXAS

SAMPLE CONDITIONS PRESSURE 540.0 PSIG

TEMPERATURE..... 74.0 F

SECURED BY : BE

FRACTIONAL ANALYSIS
CALCULATED @14.650 PSIA AND 60F

	MOL%	GPM
HYDROGEN SULFIDE.	0.00	
NITROGEN.....	1.03	
CARBON DIOXIDE...	1.02	
METHANE.....	80.10	
ETHANE.....	11.24	2.990
PROPANE.....	4.36	1.193
ISD-BUTANE.....	0.57	0.185
NOR-BUTANE.....	1.09	0.342
ISD-PENTANE.....	0.23	0.084
NOR-PENTANE.....	0.22	0.079
HEXANES.....	0.10	0.041
HEPTANES +	0.04	0.018
TOTAL.....	100.00	4.934

SULPHUR DETERMINATION

GRAINS/100SCF	
HYDROGEN SULFIDE..	0.000
MERCAPTANS.....	0.000
SULFIDES.....	0.000
RESIDUAL SULPHUR..	0.000
TOTAL.....	0.000

LIQUEFIABLE HYDROCARBONS

	GPM	GPM
PROPANE.....	1.193	
BUTANES.....	0.527	
LPG.....		1.722
GASOLINE.....		0.222
SUBTOTAL.....		1.944
ETHANE.....		2.990

TOTAL..... 4.934

REID VAPOR PRESSURE

26 LB..... 0.319
12 LB..... 0.214

MIXTURE SPECIFIC GRAVITY

CALCULATED FROM ANALYSIS..... 0.701
DETERMINED BY RANAREX..... 0.000

MIXTURE HEATING VALUE..... DRY..... 1193 WET..... 1173 BTU

DISTRIBUTION

GARY FLETCHER

505 885-1601
250 32711

RUN BY K. CASWELL

APPROVED

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