

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

Form C-1
Revised 1-65

Type Test: ☒ Initial		CONFIDENTIAL		RECEIVED BY Special Agent 7-24-86 JAN - 2 1987	
Company BASS ENTERPRISES PRODUCTION CO.				Location O. C. D. ARTESIA, CALIF.	
Pool POKER LAKE, S. (MORROW)		Formation MORROW		Unit POKER LAKE UNIT	
Completion Date 7/29/86		Total Depth 15,610		Flow Line Size 14,906' 3424.1	
Casing Size 7"		Set At 32.0 6,094 14,950		Perforations From 14,894 To 14,898	
Tubing Size 2-3/8		Set At 4.7 1,995 14,760		Perforations To	
Type Well - Single - Protenthead - G.G. or G.O. Multiple SINGLE				Packer Set At 14,760	
Producing Thru TUBING		Reservoir Temp. °F 214 @ 14,896		Mean Annual Temp. °F 60	
L		H		Baro. Press. - P _a 13.2	
G _g 0.575		% CO ₂ 1.11		% N ₂ 0.39	
% H ₂ S 0		Prover 0		Meter Run 4,206	
FLANGE		County EDDY		State NEW MEXICO	

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
SI							6822	77			
1.	4.03 X 1.75			300	9	89	6678	77	0	0	1.0
2.	4.03 X 1.75			400	26	96	6300	77	0	0	1.0
3.	4.03 X 1.75			600	40	93	5550	77	0	0	1.0
4.	4.03 X 1.75			800	76	79	4000	78	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 _{sp}	Rate of Flow Q, Mcfd
1	19.76	53.09	313.2	.9732	1.3190	1.0201	1374
2	19.76	103.65	413.2	.9671	1.3190	1.0249	2678
3	19.76	156.61	613.2	.9697	1.3190	1.0375	4108
4	19.76	248.60	813.2	.9822	1.3190	1.0556	6719
5.							

NO.	P _t	Temp. °F	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.
1	.46	549	1.58	.961	0	
2	.61	556	1.60	.952	0	
3	.90	553	1.59	.929		
4	1.20	539	1.55	.898		
5.						

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	8494.1	72149								
1		8300.3	68895	3255			.575	.575	678	348
2		7919.4	62717	9433						
3		7276.4	52946	19204						
4		5632.7	31727	40422						
5										

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.785$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9651$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.436$$

Absolute Open Flow	9651	Mcfd @ 15.0 p.s.i.g.	Angle of Slope	58	Slope, n	0.625
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Remarks: BHP SUBSTITUTED FOR WELLHEAD PRESSURES

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	ARC PRESSURE DATA INC	S. H. ROWLAND	