

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

Form C-122
Revised 9-1-65

Test ☐ Initial ☐ Annual ☒ Special		Date 02-11-80	
Company BASS-FRANK ENTERPRISES		Location MORROW	
Field SOUTH SALT LAKE		Unit HAT MESA	
Completion Date 02-18-80	Total Length 14,100	Flow Line To 13846	Elevation 3746 GL
Csg. Size 5 1/2	Wt. 17#LT&C	Set At 13859	To 13921
Trq. Size 2 3/8	Wt. 4.7	Set At 1.995	To 13,774
Type Well - Single - Production - G.G. or G.O. Multiple SINGLE		Backer Set At 13746	
Producing Thru TBG.	Reservoir Temp. °F 212° 13,775	Mean Annual Temp. °F 60	State NEW MEXICO
L 13,775	H 13,775	Gg .650	Meter Run 4
% CO ₂ .494	% N ₂ .814	% H ₂ S FLG.	Prover 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.	
51							1950			
1.	4 X 1.500			510	1.0	78	1283			1 HR.
2.	4 X 1.500			520	3.5	124	1260			1 HR.
3.	4 X 1.500			525	5.5	122	1078			1 HR.
4.	4 X 1.500			510	5.0	94	780			2 HR. & 30 min.
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Comp. Factor Fpv	Rate of Flow Q, Mgd
1	10.84	22.87	523.2	.9831	1.240	1.049	317
2	10.84	43.20	533.2	.9436	1.240	1.036	568
3	10.84	54.41	538.2	.9452	1.240	1.038	718
4	10.84	51.15	523.2	.9688	1.240	1.044	695
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/boil.
					24.947	
					53.83 @ 60	
1	.78	538	1.43	.908	Specific Gravity Separator Gas	.650
2	.80	584	1.56	.931	Specific Gravity Flowing Fluid	X X X X X
3	.80	582	1.55	.929	Critical Pressure	670 P.S.I.A.
4	.78	554	1.48	.918	Critical Temperature	375 °R
5.						

* $P_c = 2136.4$ $P_c^2 = 4564.2$

NO.	SI _t	P _w	P _w ²	P _c ² - P _w ²
1	1497.2	1085.2	1177.7	3386.5
2	1979.2	1420.3	2117.3	2546.9
3	1762.2	1270.0	1612.9	2951.3
4	1324.2	964.0	929.3	3634.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.547$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.547$

A - F = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.110$

Absolute Open Flow 1,110 Mcf/D @ 60°	Angle of Slope 45	Slope, n 1.00
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Remarks: **BOTTOM HOLE PRESSURE MEASURED WITH KUSTER GAUGE, WELL MADE 5 BBLs OF CONDENSATE DURING TEST (POINT ALIGNMENT TO FLAT A SLOPE OF 45 WAS DRAWN THRU HIGH RATE OF FLOW. *CALCULATED FROM KNOWN BOTTOM HOLE PRESSURE.**

Approved By:	Conducted By: LARRY DAVIS	Calculated By: LARRY DAVIS	Checked By:
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WILSON COUNTY DIVISION
OIL CONSERVATION DIV.

RECEIVED
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