

56.7/393-3450

Start Date of Test

4-12/4-13-1990

Company: V. H. WESTBROOK					Lease: VAUGHN A-12 No. 2				
Well No.	Sec.	Twp.	Rge.	County	Pool: JALMAT				
D 12	24	36	LEA						
Type Well: SINGLE		Producing Thru: ☒		Tubing	Casing	Top of Pay		Bar. Pressure: 13.2	Compressor
Rate of Previous Maximum Constant Test				Rate of Previous Back Pressure Test: 1.000		Gravity: 1.750		Meter Sec. No.	Acce Factor

FLOW DATA					FLOWING PRESSURES, PSIA		DURATION OF FLOW HOURS
Flow Line Size	Choke Orifice Size	Static Pressure Psig.	Diff. h _w	Temp. °F	Tubing	Casing	
2	X .500	90		60	103.2		17 1/2 HRS.

VOLUME CALCULATIONS

Coefficient (24 - Hour)	$\sqrt{h_w P_m}$	Pressure Psia.	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 Psia.
4.276		103.2	1.000	1.155	1.010	515

$$Q = \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_r^2} \right]^{n_1}$$

Pr	Temp. R	Tr	Z
.15	520	1.32	.981

SHUT-IN DATA, PSIA

DURATION	TUBING	CASING
24 Hour		
48 Hour		
72 Hour	123.2	

NE	ITEM	SOURCE	48.2	263.2	613.2	863.2
1	P _c ²		15.2			
2	P _d ²		2.3			
3	P _r ²		10.7			
4	P _c ² - P _d ²	1-2	12.9			
5	P _c ² - P _r ²	1-3	4.5			
6	B	2+5	2.867			
7	Log B					
8	n ₁		1.000			
9		7+8				
10	B ^{n₁}	Antilog 7	2.867			
11	Q-MCF/D		515			
12	D ₁	10+11	1.477			

FV CORRECTED TO 6.92% CO₂ & 2.0% N₂

- = Slope of Wellhead Deliverability Curve (P_c² - P_t² vs Q)
- = Actual flow at end of Flow Period at Wellhead Press., P_t
- = Maximum Shut-in Pressure, Psia Observed in a 72 Hour Period
- = Flowing Wellhead Pressure (tubing if flowing thru tubing and vice versa), Psia
- = Deliverability Pressure, Psia
- = Wellhead Deliverability & Deliverability Pressure (P_d), MCF/Day

Witnessed By: (Name)	<i>John E. Thomas</i>
Company:	<i>John West Eng. Co.</i>
Tested By:	<i>Bob Murray</i>
Calculated By:	<i>Bob Murray</i>