

dst
File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-22-91	
Company McCLELLAN OIL				Connection AIR		
Pool S. Perm Slope Also				Formation ABO		Unit
Completion Date 2-11-91		Total Depth 4575		Plug Back TD 4500		Elevation
Casing Size 4-1/2		Set At 4300		Perforations: From OPEN To ENDED		Farm or Lease Name ALLEN FED
Tubg. Size 2-3/8		Set At TD		Perforations: From 4362 To 4377		Well No. 1
Type Well - Single - Blindhead - G.C. or G.O. Multiple SINGLE				Packer Set At NONE		Unit Sec. Twp. Rge. D. 7 10S 26E
Producing Thru TUBING		Reservoir Temp. °F 60		Baro. Press. - P _g 13.2		County CHAVES
L 4369		H 4369		C _g .63		% CO ₂ % H ₂ % H ₂ S Prover 6"
Meter Run Taps						

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
1	2	x	7/32	860			975		1000		
2	2	x	5/16	700			860		900		1 hr
3	2	x	7/16	460			700		750		"
4	2	x	5/8	250			460		600		"
5							250		500		"

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	.8348		873.2	1.000	1.2599	1.0869	1004
2	1.6720		713.2	1.000	1.2599	1.0690	1607
3	3.4080		473.2	1.000	1.2599	1.0450	2123
4	6.473		263.2	1.000	1.2599	1.0240	2198
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

P _c 1089 P _c ² 1186				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		970	940	245
2		808	652	533
3		638	407	778
4		529	280	906
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.31$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2600$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.18$

Absolute Open Flow _____ 2600 _____ Mcfd @ 15.025	Angle of Slope θ _____ 58 _____	Slope, n _____ .618 _____
Remarks: _____		
Approved By Division _____ Conducted By: _____ Calculated By: _____ Checked By: _____		
KELTIC SERVICES MIKE KELLY		

