

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12-02-87	
Company MERIDIAN OIL		Connection	
Pool BLANCO		Formation MESAVERDE	
Completion Date 11-17-87		Total Depth 5210'	Plug Back TD 5099'
Elevation 5976'		Farm or Lease Name MURPHY D	
Coq. Size 4.5000	Wt. 10.5	d 4.0520	Set At 5117
Perforations: From 4249 To 4960		Well No. 4	
Thq. Size 2.3750	Wt. 4.7	d 1.9950	Set At 4963
Perforations: From To		Unit Sec. Twp. Rge. 27 30 11	
Type Well - Single - Dradhead - G.G. or G.O. Multiple SINGLE		Packer Set At N/A	
Producing Thru TUBING		Reservoir Temp. °F p	Mean Annual Temp. °F 12.2
Baro. Press. - P _g 12.2		State NEW MEXICO	
L	H	G _g .700	% CO ₂ % N ₂ % H ₂ S
Prover		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 3/4						1096		1096		
2.							449		898	67	1 HR.
3.							358		830	69	2 HRS.
4.							330		799	70	3 HRS.
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	12.365		342.2	1.0000	9258	1.0000	3917
2.							
3							
4.							
5.							

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

P _c 1108.2 P _c ² 1228107.2	
NO.	P _r ² P _w P _w ² P _c ² - P _w ²
1	811.2 658045.4 570061.8
2	
3	
4	
5	

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.1543$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6965$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7782$$

Absolute Open Flow 6965	Mcf/d @ 15.025	Angle of Slope	Slope, n .75
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Remarks: **unloaded big slug of oil (paraffin) & water in 1 3/4 minutes, heavy water mist for 45 minutes, medium mist of oil & water throughout test.**

Approved By Division	Conducted By: STEVE MCCAMENT	Calculated By: JAMES WM. SMITH	Checked By:
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