

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File
C-122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 5-23-79		JUN 11 1979		
Company Durham, Inc. ✓				Connection None To Date				G.C.C.	
Pool Cemetery <i>S. Snow</i>				Formation Morrow				Unit ARTESIA, ARTES	
Completion Date 5-17-79		Total Depth 9863		Plug Back TD 9840		Elevation 3856 GL.		Farm or Lease Name Shell Fed. Com.	
Csg. Size 5 1/2	Wt. 17#	d 4.892	Set At 9863	Perforations: From 9650 To 9666		Well No. 1			
Plg. Size 2 3/8	Wt. 4.7#	d 1.995	Set At 9668	Perforations: From 9600 To 9602		Unit B	Sec. 8	Twp. 21S	Rge. 24E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 9597		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 181 @ 9590		Mean Annual Temp. °F 70		Baro. Press. - P _g 13.2		State New Mexico	
L 9633	H 9633	Cg 0.594	% CO ₂ 0.76	% N ₂ 0.31	% H ₂ S None	Prover Pos. Ck.	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	
SI	134 hours			2102			2102		Pkr.		
1.	2"	X	5/64"	1934		74	1934	74	"		60 min.
2.	2"	X	6/64"	1870		76	1870	76	"		60 min.
3.	2"	X	7/64"	1771		76	1771	76	"		60 min.
4.	2"	X	8/64"	1637		76	1637	76	"		60 min.
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	0.0966		1947.2	0.9868	1.298	1.135	273.5
2	0.1418		1883.2	0.9850	1.298	1.135	387.5
3	0.1969		1784.2	0.9850	1.298	1.134	509.3
4	0.2618		1650.2	0.9850	1.298	1.133	625.8
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	3.66	534	1.51	0.776	None	None	0.594	XXXXXX		
2	3.53	536	1.51	0.776						
3	3.34	536	1.51	0.777						
4	3.14	536	1.51	0.779						
5										

NO.	P _f	P _s	P _s ²	P _f ² - P _s ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	2676.2	7162			2.64769	2.28209
1		2457.2	6038	1124		
2		2373.2	5632	1530		
3		2247.2	5050	2112		
4		2111.2	4457	2705		
5						

Absolute Open Flow 1428.13 Mcfd @ 15.025			Angle of Slope 49.722		Slope, n 0.84739	
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Remarks: Bottom hole pressure measured with Amerada RGP-3 gauge serial number 37030N 0-4000 psi.

Approved By: Commissioner	Conducted By: Teffeller, Inc.	Calculated By: D. A. Warren, Jr.	Checked By:
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