

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

dsf

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 7 28 90	
Company DEKALB ENERGY			Connection FLARE		
Pool DIAMOND MOUND			Formation MORROW GAS		Unit
Completion Date 7 25 90		Total Depth 9400	Plug Back TD 9353		Elevation 3654
Farm or Lease Name CROW FLATS #4 FED					
Coq. Size 5.500	Wt. 17.0	d 4.892	Set At 9400	Perforations: From 9259 To 9263	
Well No. COM 1					
Thg. Size 2.375	Wt. 4.7	d 1.995	Set At 9029	Perforations: From To	
Unit Sec. Twp. Rge. SEC 4 T 16S R 28E					
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE GAS				Packer Set At 9029	
County EDDY					
Producing Thru TBG AS		Reservoir Temp. °F 165 @ 9177	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	
State NM					
L 9177	H 9177	G _g .641	% CO ₂ .43	% N ₂ .89	% H ₂ S .00
Prover .0		Meter Run 4.0	Taps FLANGE		

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	TUBING DATA		BHP DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI									2666	165	72.0
1.	4.00X1.000			330	28.0	58			2143	165	1.0
2.	4.00X1.000			330	13.0	58			2201	165	1.0
3.	4.00X1.000			320	6.0	80			2401	165	1.0
4.	4.00X1.000			320	3.0	82			2559	165	1.0
5.											

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Fl.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow
							Q, Mcd
1	4.75	98.03	343.2	1.0019	1.2490	1.0338	603
2	4.75	66.80	343.2	1.0019	1.2490	1.0338	411
3	4.75	44.71	333.2	.9813	1.2490	1.0282	268
4	4.75	31.62	333.2	.9795	1.2490	1.0278	189
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Rate of Flow
					Mcf/bbl.	Deg.	
1	.51	518	1.141	.936	0	0	603
2	.51	518	1.41	.936	0	0	411
3	.50	540	1.47	.946	641	XXXXXX	268
4	.50	542	1.47	.947	641	XXXXX	189
5.							

NO.	P _i ²	P _w ²	P _w ²	P _e ² - P _w ²	P _e 2099.1	P _e ² 4406	Rate of Flow	
							Mcf/bbl.	Deg.
1	4649	1695	2872	1534			603	
2	4903	1739	3024	1382			411	
3	5828	1893	3584	822			268	
4	6616	2016	4063	343			189	
5								

(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 2.8714$ (2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2.2652$

AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1366$

Absolute Open Flow 1366 Mcd @ 15.025 Angle of Slope @ 52.2 Slope, n .775

Remarks: 4-POINT TEST RAN INVERSE
CHOKE SIZES 12/64 10/64 3/64 1/64

Approved By Division _____ Conducted By: BENNETT-CATHEY Calculated By: MONTY RANDOLPH Checked By: _____