

File

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

RECEIVED BY MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

2-1985

Type Test ☒ O.C. ☒ Initial		☐ Annual ☐ Special		Test Date 9-27-85	
CABLES, OFFICE AMOCO Prod. Co.		Connection ATMOSPHERE			
Pool N. TURKEY TRACK AtoKa		Formation ATOKA		Unit	
Completion Date 09-19-85		Total Depth 11436.		Plug Back TD 10825.	
				Elevation 3413.	
Farm or Lease Name STATE EC					
Csq. Size 5.500	Wt. 15.5	d 4.950	Set At 11436.	Perforations: From 10472. To 10598.	
Well No. 1					
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 10535.	Perforations: From 0. To 0.	
Unit C-5-19-29					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10354.	
Producing Thru TUBING		Reservoir Temp. °F 152.0 10535.		Mean Annual Temp. °F 60.0	
				Baro. Press. - P _a 13.2	
State NEW MEXICO					
L. 10535.	H. 10535.	G _g 0.670	% CO ₂ 0.46	% N ₂ 0.89	% H ₂ S 0.0
Prover 0.0	Meter Run 4.0	Taps FLANGE			

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	Duration of Flow
SI							3935.	64.	0.		24.0
1.	4.03 X 1.375			135.	6.1	82.	3735.	64.	0.	0.	1.0
2.	4.03 X 1.375			140.	13.9	82.	3587.	63.	0.	0.	1.0
3.	4.03 X 1.375			145.	37.0	82.	3224.	63.	0.	0.	1.0
4.	4.03 X 1.375			145.	56.0	80.	2903.	61.	0.	0.	1.0
5.											

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.	9.07	30.07	148.2	0.9795	1.2217	1.0136	331.
2.	9.07	46.15	153.2	0.9795	1.2217	1.0141	508.
3.	9.07	76.51	158.2	0.9795	1.2217	1.0146	843.
4.	9.07	94.12	158.2	0.9813	1.2217	1.0147	1039.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.22	542.	1.44	0.9773	77.7	
2.	0.23	542.	1.44	0.9772	51.0	
3.	0.24	542.	1.44	0.9771	0.670	XXXXXXX
4.	0.24	540.	1.43	0.9771	XXXXX	0.706
5.						

NO.	P _r	P _w	P _w ²	P _c ² - P _w ²
1.	14049.	3746.	14032.	1538.
2.	12961.	3601.	12966.	2604.
3.	10479.	3239.	10494.	5076.
4.	8504.	2923.	8544.	7026.
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.2141}{1.0141} = 2.189$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1889.$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8191$

Post ID-2
10-11-85
Comp. Ato.

Absolute Open Flow 1889. Mcfd @ 15.025		Angle of Slope θ 53.4		Slope, n 0.752	
Remarks:					
Approved By Commission:		Conducted By: BENNETT AND CATHEY		Calculated By: STEVE BATES (AMOCO)	
				Checked By: MIKE MADERE (AMOCO)	