NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 10-16-80	
Company: Yates Petroleum Corporation ✓		Connection: Transwestern Pipeline Company			
Pool: Wildcat Abo		Formation: abo		Unit	
Completion Date: 6-19-80	Total Depth: 5523 KB	Plug Back TD: 3472 KB	Elevation: 3943 KB	Farm or Lease Name: Iwanowski MM Federal Com	
Csg. Size: 5½ / Wt.: 14# / d: 5012 / Set At: 5040 KB		Perforations: From 3404 To 3456 KB		Well No.: 1	
Tbg. Size: 2 7/8 / Wt.: 6.5# / d: 2441 / Set At: 3379 KB		Perforations: From To		Unit: H / Sec.: 34 / Twp.: 6S / Rge.: 24E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 3379 KB		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 93 @ 3430	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3425	3425	0.656	1.26	6.06	N.7	----	2	Flange

	FLOW DATA						TUBING DATA		CASING DATA		
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							950	89			Weeks
1.	2.067	x	0.500	420	11	88	902	89			1½ hours
2.	2.067	x	0.500	420	21	88	868	90			1 hour
3.	2.067	x	0.500	421	39	88	805	91			1 hour
4.	2.067	x	0.500	421	73	88	672	92			1 hour
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	1.189	69.03	433.2	.9741	1.235	1.032	102
2	1.189	95.38	433.2	.9741	1.235	1.032	141
3	1.189	130.13	434.2	.9741	1.235	1.032	192
4	1.189	178.04	434.2	.9741	1.235	1.032	263
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.652	548	11531	0.939
2	0.652	548	11531	0.939
3	0.654	548	11531	0.939
4	0.654	548	11531	0.939
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.656 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.656
Critical Pressure 664 P.S.I.A. 664 P.S.I.A.
Critical Temperature 358 R 358 R

P_t 1051.2 P_c^2 1105

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			996	109
2			923	182
3			795	310
4			556	549
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0128$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4715$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 387$

Absolute Open Flow 387 Mcfd @ 15.025 Angle of Slope θ 611.1 deg. Slope, n 0.5522

Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT.
Calculations worksheet C122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver	Eddie Mahfood	