NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

C/SF C-122

RECEIVED
OCT 27 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-1-81	
Company: Yates Petroleum Corporation		Connection: El Paso Natural Gas			
Pool: Kennedy Farms (U. Penn)		Formation: Cisco-Canyon			Unit:
Completion Date: 8-23-81	Total Depth: 8933 KB		Plug Back TD: 7350 KB	Elevation: KB	Farm or Lease Name: Blevins IK Com
Csg. Size: 4 1/2" / Wt.: 11.6 / d: 4.000 / Set At: 8877			Perforations: From 7269 To 7292 KB		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: 7236			Perforations: From To		Unit: D / Sec.: 35 / Twp.: 17s / Rge.: 26e
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single			Packer Set At: 7236 KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 130 @ 7281	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
7272	7272		1.13	3.70	Nil	--	4"	Flanged

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI											
1.	4.026	X	0.625	565	4	75	2085	92			Days
2.	4.026	X	0.625	490	16	73	1938	90			18 hrs.
3.	4.026	X	0.625	449	36	70	1624	91			24
4.	4.026	X	0.625	435	56	70	1178	92			24
5.							505	93			24

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	1.845	48.09	578.2	.9859	1.188	1.0608	110
2	1.845	89.73	503.2	.9877	1.188	1.0539	205
3	1.845	128.99	462.2	.9905	1.188	1.0505	294
4	1.845	158.43	448.2	.9905	1.188	1.0487	361
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.860	535	1.390	0.8886
2	0.749	533	1.384	0.9003
3	0.688	530	1.377	0.9062
4	0.667	530	1.377	0.9093
5				

P_c 2720.2 P_c^2 7400

Gas Liquid Hydrocarbon Ratio 43.96 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 60.8 Deg.

Specific Gravity Separator Gas 0.709 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX 0.7715

Critical Pressure 672 P.S.I.A. 671.5 P.S.I.A.

Critical Temperature 385 R 406.4 R

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1			6439	961
2			4498	2902
3			2300	5100
4			411	6989
5				

(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 1.0588$

(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 1.0380$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 375$

Absolute Open Flow 375 Mcfd @ 15.025

Angle of Slope θ 56.9 deg

Slope, n 0.6527

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

Approved by Commission:	Conducted By:	Calculated By:	Checked By:
	Bob Gary	Eddie Mahfood	