NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
SEP 7 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [XX] Initial [ ] Annual [ ] Special — Test Date: 6/30/82

Company: Yates Petroleum Corp			Connection: Transwestern Pipeline		Unit:
Pool: Pecos Slope - Abo Gas			Formation: Abo		
Completion Date: 3/13/82	Total Depth: 4300		Plug Back TD: 4238	Elevation: 3695 GL	Farm or Lease Name: Federal HJ
Csg. Size: 4 1/2" / Wt.: 9.5# / d: 4.090 / Set At: 4300			Perforations: From 3678 To 3846		Well No.: #3
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 3670			Perforations: From To		Unit: C / Sec.: 31 / Twp.: 6S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: None		County: Chaves
Producing Thru: Tubing	Reservoir Temp. °F: 94° @ 3670		Mean Annual Temp. °F: 62°	Baro. Press. – P_a: 13.2 PSI	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3670	3670	.684	5.36	4.76	0	--	2"	Flanged

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F
SI						
1.	2.067	x	1.000	320	36.0	80°
2.	2.067	x	1.000	230	54.6	73°
3.	2.067	x	1.000	230	80.7	73°
4.	2.067	x	1.000	220	154.4	75°
5.						

TUBING DATA / CASING DATA

NO.	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI	992				
1.	800	62°			24 hr
2.	759	62°			24 hr
3.	704	62°			24 hr
4.	489	62°			24 hr
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	4.946	109.5	333.2	0.9813	1.209	1.027	660
2	4.946	115.3	243.2	0.9877	1.209	1.021	695
3	4.946	140.1	243.2	0.9877	1.209	1.021	845
4	4.946	189.8	233.2	0.9859	1.209	1.019	1140
5							

NO.	P_t	Temp. °R	T_t	Z
1	0.49	540	1.49	0.949
2.	0.36	533	1.47	0.960
3.	0.36	533	1.47	0.960
4.	0.34	535	1.48	0.963
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: -- Deg.
Specific Gravity Separator Gas: .684 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .684
Critical Pressure: 681 P.S.I.A. 681 P.S.I.A.
Critical Temperature: 362 R 362 R

P_c 1005.2 P_c^2 1010.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	661.3		677.1	343.3
2	596.3		602.8	407.6
3	514.8		524.5	485.9
4	252.2		270.6	739.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.943$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.199$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1451$

Absolute Open Flow: 1451 Mcfd @ 15.025 — Angle of Slope θ: — Slope, n: .730

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andie Alderson	