NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED BY
FEB 29 1984
O. C. D.
ARTESIA, OFFICE

Type Test: 4 POINT [X] Initial [ ] Annual [ ] Special				Test Date: 1-25-84	
Company: COSTA RESOURCES		Connection: TO AIR NEW WELL			
Pool: Undesignated		Formation: MORROW		Unit:	
Completion Date: 1-16-84	Total Depth: 10985	Plug Back T.D.: 10920	Elevation: ~~3663~~	Farm or Lease Name: TWO FORKS STATE	
Csg. Size: 5.500 / Wt.: 20.0 / d: 4.778 / Set At: 10920		Perforations: From 10707 To 10711		Well No.: #1	
Tbg. Size: 2.785 / Wt.: 6.5 / d: 2.441 / Set At: 10624		Perforations: From 0 To 0		Unit: B / Sec.: 2 / Twp.: 18S / Rge.: 28E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 10624		County: EDDY	
Producing Thru: TUBING	Reservoir Temp. °F: 158 @ 10709	Mean Annual Temp. °F: 60.0°	Baro. Press. – P_a: 13.2	State: NEW MEXICO	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10709	10709	0.647	0.52	0.36	0	0	3.1	FLANGE

	FLOW DATA				TUBING DATA		B.H.P. 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.	CHOKE	Duration of Flow
SI					3710		4286		72.0
1.	3.07 X 1.000	420	4.0	70	2978	60	4066	4/64	1.0
2.	3.07 X 1.000	400	7.5	67	2790	58	3858	5/64	1.0
3.	3.07 X 1.000	400	14.5	72	2627	52	3680	6/64	1.0
4.	3.07 X 1.000	400	32.0	60	2367	52	3313	9/64	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.79	41.63	433.2	0.9905	1.2432	1.0412	256.
2	4.79	55.67	413.2	0.9933	1.2432	1.0399	342.
3	4.79	77.40	413.2	0.9887	1.2432	1.0389	473.
4	4.79	114.99	413.2	1.0000	1.2432	1.0414	713.
5							

NO.	P_t	Temp. °R	T_t	Z
1	0.64	530.	1.43	0.922
2	0.62	527.	1.42	0.925
3	0.62	532.	1.43	0.927
4	0.62	520.	1.40	0.922
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas 0.647 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.647
Critical Pressure 672. P.S.I.A. 672. P.S.I.A.
Critical Temperature 371. R 371. R

P_c 3280.7 P_c^2 10763.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	16640.	3098.	9596.	1167.
2	14986.	2927.	8569.	2194.
3	13640.	2783.	7745.	3018.
4	11064.	2491.	6207.	4555.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.3629$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.3629$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1685.$

Post TD 2
3 2 2
Pumpy BR

Absolute Open Flow 1685. Mcfd @ 15.025 Angle of Slope θ 52.9 Slope, n 0.758

Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA PRESSURE ELEMENTS.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	RICHARD TOWNLEY	BENNETT & CATHEY	