NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
AUG 9 1979
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 7-26-79	
Company: CITIES SERVICE COMPANY		Connection: TO AIR			
Pool: 71 Lovington-Morrow Gas			Unit: MORROW		
Completion Date: 7-26-79	Total Depth: 12,500		Plug Back TD: 12,477	Elevation: 3025 GR	Farm or Lease Name: VILLA A Com
Csg. Size: 5 1/2	Wt.: 20 # 17 #	d: 4.892 4.778	Set At: 12,499	Perforations: From 12,452 To 12,454	Well No.: 1
Tbg. Size: 2 7/8	Wt.: 6.5	d: 2.441	Set At: 12,389	Perforations: From OPEN To END	Unit: K Sec.: 8 Twp.: 23S Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 12,383		County: EDDY
Producing Thru: TBG	Reservoir Temp. °F: 198 @ 12,453	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2		State: NEW MEXICO
L: 12389	H: 12389	Gg: .576	% CO_2: 1.05	% N_2: .54	% H_2S: Prover: Meter Run: 4" Taps: F/G

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					3705			CHOKE	72 HRS.
1.	4 x 1.500	510	30	95	2165			16/64	1 HR.
2.	4 x 1.500	510	16	102	2707			15/64	1 HR.
3.	4 x 1.500	510	11	110	2732			14/64	1 HR.
4.	4 x 1.500	500	4	110	3180			13/64	1 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	10.84	125.28	523.2	.9680	1.318	1.031	1786
2	10.84	91.49	523.2	.9619	1.318	1.030	1295
3	10.84	75.86	523.2	.9551	1.318	1.028	1064
4	10.84	45.31	513.2	.9551	1.318	1.028	636
5							

NO.	P_t	Temp. °R	T_f	Z
1	.78	555	1.60	.940
2	.78	562	1.62	.943
3	.78	570	1.65	.947
4	.76	570	1.65	.947
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .576 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
Critical Temperature 346 R _____ R

P_c 3718.2 P_c^2 13,825.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2214.4	4903.6	8921.4
2		2724.7	7424.0	6401.0
3		2748.3	7553.2	6271.8
4		3194.2	10202.9	3622.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.550$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.550$

Absolute $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.768$

Absolute Open Flow 2,768 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.00

Remarks: WELL MADE 11 BBLS. OF WATER DURING TEST. HIGH RATE WAS RUN FIRST DUE TO WATER PROBLEMS. POINT ALIGNMENT TOO FLAT; A 45° ANGLE OF SLOPE WAS DRAWN THROUGH HIGH RATE OF FLOW.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W. S.	R. R.	J. W.