STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

JAN 23 '90

O. C. D.
ARTESIA, OFFICE

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1/8/90	
Company: Santa Fe Engergy		Connection: Pipeline			
Pool: ~~Undesignated~~ Salt Draw Atoka Gas		Formation: Atoka		Unit	
Completion Date: 12/9/89	Total Depth: 13450	Plug Back TD: 12520	Elevation: 0	Farm or Lease Name: Salt Draw 28 Fed.	
Csg. Size: 5.500 / Wt.: 23.0 / d: 4.670 / Set At: 13450		Perforations: From 11660 To 11667		Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 14493		Perforations: From 0 To 0		Unit: H / Sec.: 28 / Twp.: 24S / Rge.: 28E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single-Gas		Packer Set At: 11457		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 188 @ 11664	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: N M	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11664	11664	.588	.46	.56	.00	.0	2.1	Flange

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	BHP DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							7920	188	72.0
1.	2.07 x 1.500	710	1.8	95	0	0	7428	188	1.0
2.	2.07 x 1.500	710	3.0	94	0	0	7102	188	1.0
3.	2.07 x 1.500	715	6.3	90	0	0	6354	188	1.0
4.	2.07 x 1.500	718	10.5	92	0	0	5216	188	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	12.76	35.58	723.2	.9680	1.3041	1.0467	600.
2.	12.76	46.58	723.2	.9688	1.3041	1.0471	786.
3	12.76	67.46	728.2	.9723	1.3041	1.0488	1145.
4.	12.76	87.62	731.2	.9706	1.3041	1.0483	1483.
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.07	555	1.57	.913
2.	1.07	554	1.57	.912
3.	1.08	550	1.56	.909
4.	1.08	552	1.57	.910
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: .588 | XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX | .588
Critical Pressure: 674. P.S.I.A. | 674. P.S.I.A.
Critical Temperature: 352. R | 352. R

P_c 6576.3 P_c^2 43247

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	55371	6122	37476	5771
2	50626	5823	33912	9335
3	40541	5146	26480	16768
4	27345	4139	17135	26113
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6562$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3874$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2058.$

Absolute Open Flow: 2058 Mcfd @ 15.025 | Angle of Slope θ: 57.5 | Slope, n: .637

Remarks: Choke size: 1st rate 3.5/64 2nd rate 5/64
3rd rate 6/64 4th rate 7.5/64

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Bennett & Cathey	Matt Lee	