CISF File

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-19-89	
Company: SANTA FE ENERGY			Connection: AIR		
Pool: ~~SOUTH~~ SAND DUNES West Atoka			Formation: ATOKA		Unit
Completion Date: 12-15-89	Total Depth: 14848		Plug Back TD: 14620	Elevation: 0	Farm or Lease Name: PURE GOLD C 17
Csg. Size: 4.5 / Wt.: 13.5 / d: 3.920 / Set At: 14848			Perforations: From 13348 To 13374		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 13161			Perforations: From To		Unit: 17 Sec.: 23S Twp.: 31E Rge.:
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE - GAS			Packer Set At: 13112		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 196 @ 13361		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13361	13361	0.592	0.470	0.750	0	0	4.026	FLANGE

	FLOW DATA				TUBING DATA		BHP 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.	Temp. °F	Duration of Flow
SI					6820	60	8603	196	72.0
1.	4.026 X 1.500	330	2.0	89	5425	60	6869	196	1.0
2.	4.026 X 1.500	330	5.5	83	4670	60	6154	196	1.0
3.	4.026 X 1.500	330	9.0	74	3950	60	5309	196	1.0
4.	4.026 X 1.500	335	13.0	76	3275	60	4516	196	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	10.84	26.20	343.2	.9732	1.2997	1.0233	368.
2.	10.84	43.45	343.2	.9786	1.2997	1.0243	614.
3	10.84	55.58	343.2	.9868	1.2997	1.0259	793.
4.	10.84	67.28	348.2	.9850	1.2997	1.0259	958.
5.							

NO.	P_t	Temp. °R	T_r	Z
1	51	549.	1.55	.955
2.	51	543.	1.54	.953
3.	51	534.	1.51	.950
4.	52	536.	1.52	.950
5				

Gas Liquid Hydrocarbon Ratio: 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 0 Deg.
Specific Gravity Separator Gas: .592 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .592
Critical Pressure: 674 P.S.I.A. 674 P.S.I.A.
Critical Temperature: 353 R 353 R

P_c 7013.4 P_c^2 49188

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	47362.	5436.	29553.	19634.
2	38037.	4804.	23076.	26112.
3	28328.	4074.	16595.	32593.
4	20516.	3412.	11641.	37547.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3100$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3100$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1255.$

Absolute Open Flow: 1255. Mcfd @ 15.025 | Angle of Slope θ: 45.0 | Slope, n: 1.000

Remarks: CHOKE SIZE: 1ST RATE 4/64 2ND RATE 6/64 3RD RATE 8/64 4TH RATE 12/64

Approved By Division	Conducted By:	Calculated By:	Checked By:
	C & W WIRELINE dba	MATT LEE	