clsf File

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [x] Initial [ ] Annual [ ] Special — Test Date: 12-19-94

Company: SNOW OIL & GAS INC.	Connection: FLARE		
Pool: CARLSBAD SOUTH	Formation: MORROW		Unit: E
Completion Date: 12/20/94	Total Depth: 12070	Plug Back TD: 12025	Elevation:	Farm or Lease Name: ASPEN FEDERAL
Csg. Size: 5.5 / Wt.: 17# / d: 4.767 / Set At: 12068	Perforations: From 11358 To 11372		Well No.: #1
Tbg. Size: 2.875 / Wt.: 6.5 / d: 2.441 / Set At: 11333	Perforations: From To		Unit: E / Sec.: 4 / Twp.: 24S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O Multiple: SINGLE (gas)		Packer Set At: 11089	County: EDDY
Producing Thru: Tbg (gas)	Reservoir Temp. °F: 173 @ 11365	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11365	11365	0.594	2.098	0.657	0.0	0. 0	3.0	Flg

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					3760	06	4765	173	72
1.	3.0 x 1.25	350	67.0	0	2350	60	3085	173	2.0
2.	3.0 x 1.25	350	21.5	0	2000	60	2644	173	1.0
3.	3.0 x 1.25	350	24.5	18	1600	60	2130	173	1.0
4	3.0 x 1.25	350	26.0	40	1225	60	1722	173	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	7.577	155.99	363	1.063	1.298	1.048	1709
2	15.61	88.34	363	1.063	1.298	1.048	1994
3	15.61	94.31	363	1.043	1.298	1.040	2073
4	15.61	97.82	368	1.020	1.298	1.034	2090
5							

NO	P_t	Temp. °R	T_r	Z
1	0.54	460	1.31	0.911
2	0.54	460	1.31	0.911
3	0.54	478	1.37	0.924
4	0.54	500	1.43	0.935
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.594 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 680 P.S.I.A. _____ P.S.I.A.
Critical Temperature 350 R _____ R

P_c 4778.2 P_c^2 22.83 x 10^6

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		3098.2	9.60	13.23
2		2657.2	7.06	15.77
3		2143.2	4.59	18.24
4		1735.2	3.01	19.82
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.252$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.119$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2301$

Absolute Open Flow 2301 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 0.502

Remarks: choke sizes: 1st rate 11/64 2nd 12.5/64 3rd 14.5/64 4th 17/64

Approved By Division	Conducted By:	Calculated By:	Checked By: