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			Test Date	
[x] Initial	[ ] Annual	[ ] Special	04/04/91	

Company	Connection		
Samedan Oil Corp.			

Pool	Formation	Unit
Undes Sombrero	Morrow	~~G~~

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
04/01/91	13370.	13342.	4206.	State "10"

Csg. Size	Wt.	d	Set At	Perforations:	Well No.
5.5000	17.00		13370.	From 13212. To 13242.	~~10~~ 1

Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Sec.	Twp.	Rge.
2.8750	6.50		13186.	From 0 To 0	G	10	16S	33E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Single	13138.	Lea

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tubing	212 @ 13227.	60.	13.20	NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13227.	13227.	0.703	0.56	1.00			4.026	Flange

	FLOW DATA				TUBING DATA		CASING 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						3020.	60.			105.5
1.	4.03	x 1.000	35.	12.0	70.	3005.	70.			1.0
2.	4.03	x 1.000	40.	36.0	75.	2959.	75.			1.0
3.	4.03	x 1.000	45.	135.0	80.	2870.	80.			1.0
4.	4.03	x 1.000	210.	140.0	89.	2650.	89.			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	4.75	24.05	48.2	.9905	1.1927	1.0070	136.
2.	4.75	43.76	53.2	.9859	1.1927	1.0068	246.
3.	4.75	88.64	58.2	.9813	1.1927	1.0065	496.
4.	4.75	176.77	223.2	.9732	1.1927	1.0211	996.
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.07	530.	1.37	.986
2.	.08	535.	1.38	.987
3.	.09	540.	1.40	.987
4.	.33	549.	1.42	.959
5				

Gas Liquid Hydrocarbon Ratio 109.000 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55.5 Deg.
Specific Gravity Separator Gas .703 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .727
Critical Pressure 668. P.S.I.A. 667. P.S.I.A.
Critical Temperature 387. R 395. R

P_c 3033.2 P_c^2 9200

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		3002.	9013.	187.
2		2947.	8682.	518.
3		2848.	8113.	1087.
4		2614.	6832.	2368.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.8854$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.9115$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2899.$

Absolute Open Flow 2899. Mcfd @ 15.025 Angle of Slope θ 51.8 Slope, n 0.787

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Chuck Roy/Test		