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: 11/13/80	
Company: NATOMAS NORTH AMERIA, INC.			Connection: El Paso		
Pool: Antelope Ridge			Formation: Atoka		Unit: Antelope Ridge
Completion Date: 10/15/80	Total Depth: 13,595'		Plug Back TD: 13,511'	Elevation: 3375'	Farm or Lease Name: Supron-Fed. Comm "14"
Csg. Size: 7-5/8" / Wt.: 39# / d: / Set At: 13,595'			Perforations: From 13,214' To 13,222'		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: / Set At: 12,948'			Perforations: From 13,260' To 13,262'		Unit: K / Sec.: 14 / Twp.: 23S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Dual			Packer Set At: 12,900'		County: Lea
Producing Thru: Tbg	Reservoir Temp. °F: 170° @ 12,093'		Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.20	State: New Mexico
L: 12,093' / H: 12,093' / Gg: .650 / % CO_2: / % N_2: / % H_2S: / Prover: / Meter Run: 4.0 / Taps: 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	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						5388	60			72 hrs
1.	4.03	2.5	564	6.2	103	5122	64			1 hr
2.	4.03	2.5	580	9.0	72	5001	76			1 hr
3.	4.03	2.5	611	23.0	50	4325	80			1 hr
4.	4.03	2.5	611	36.0	30	4160	80			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	32.64	60.08	577.6	.9611	1.2403	1.0449	2443
2	32.64	73.05	592.9	.9887	1.2403	1.0575	3092
3	32.64	119.91	624.1	1.0098	1.2403	1.0719	5254
4	32.64	149.89	624.1	1.0302	1.2403	1.0837	6774
5							

NO.	P_t	Temp. °R	T_r	Z
1	.86	563	1.50	.916
2	.88	532	1.42	.894
3	.93	510	1.36	.870
4	.93	490	1.31	.851
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 53.8 Deg.
Specific Gravity Separator Gas .650 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .650
Critical Pressure 670 P.S.I.A. 670 P.S.I.A.
Critical Temperature 374 R 374 R

P_c 5401.2 P_c^2 29173

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		5142	26440	2733
2		5009	25086	4087
3		4352	18936	10237
4		4213	17749	
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.5538$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.9536$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 13234$

Absolute Open Flow 13,234 Mcfd @ 15.025 Angle of Slope θ 54.5 Slope, n .714

Remarks:

Approved By Division: Jerry Sexton	Conducted By: Kenneth Brewster	Calculated By: Garrett Systems	Checked By: Art Oneal

Witnessed By
Dist. I Supv.