NEW ME O OIL CONSERVATION COMMSSIOI

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-7-77	
Company: Atlantic Richfield Company		Connection: Northern Natural Gas Company			
Pool: Eumont		Formation: Queen Gas			Unit
Completion Date: 6-22-77	Total Depth: 3688	Plug Back TD: 3895		Elevation: GL 3645	Farm or Lease Name: State 176
Csg. Size: 7" / Wt.: 24 / d: 6336 / Set At: 3879		Perforations: From 3086 To 3749			Well No.: 4
Tbg. Size: 2875 / Wt.: 6.5 / d: 2441 / Set At: 3688		Perforations: From Open To Ended			Unit: G / Sec.: 19 / Twp.: 21S / Rge.: 36E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None			County: Lea
Producing Thru: Tbg.	Reservoir Temp. °F: 91	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
3688	3688	.685	2.43	1.91	.34		4"	Pipe

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					318		317		24 hr.
1.	4 x 1.750	103	2.2	79	280	76	291		1 hr.
2.	4 x 1.750	105	5.0	79	268	75	279		30 min.
3.	4 x 1.750	108	8.0	79	248	76	262		45 min.
4.	4 x 1.750	110	10.5	78	228	75	246		45 min.
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	16.80	16.0	116.2	.9822	1.208	Nil	319
2	16.80	24.3	118.2	.9822	1.208	Nil	484
3	16.80	31.1	121.2	.9822	1.208	Nil	620
4	16.80	36.0	123.2	.9831	1.208	Nil	718
5							

NO.	P_t	Temp. °R	T_r	Z
1	0.17	539	1.42	nil
2	0.18	539	1.42	nil
3	0.18	539	1.42	nil
4	0.18	538	1.42	nil
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas .685 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 676 P.S.I.A. _____ P.S.I.A.
Critical Temperature 379 R _____ R

P_c 330.2 P_c^2 109.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		304.2	92.5	16.5
2		292.2	35.4	23.6
3		275.2	75.7	33.3
4		259.2	67.2	41.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.6077$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.9579$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1406$

Absolute Open Flow 1406 Mcfd @ 15.025 Angle of Slope θ 55.0 Slope, n 0.701

Remarks: _____

Approved By Commission: Jerry Sexton (Designated by)	Conducted By: R. Dailey	Calculated By: R. Dailey	Checked By: