NEW MEXICO OIL CONSERVATION COMMISSION

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: 6-17-74

Company: Atlantic Richfield Company	Connection: El Paso Natural Gas Company	
Pool: Jalmat	Formation: Yates	Unit

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
5-11-74	3385	3353	3485DF	McDonald State (WN)

Csg. Size	Wt.	d	Set At	Perforations	Well No.
4½	9.5	4.090	3385	From 3125 To 3282	24
Tbg. Size	Wt.	d	Set At	Perforations	Unit / Sec. / Twp. / Rge.
2 3/8	4.7	1.995	3070	From open To end	E / 25 / 22 / 36

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
Single	3070	Lea

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
Tbg.	100 @ 3385	60	13.2	New Mexico

H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3070	3070	.658				4"	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							548				72 hr.
1.	4	x	2.250	83	5.29	60	489				1 hr.
2.	4	x	2.250	86	11.56	59	431				1 hr.
3.	4	x	2.250	93	17.64	60	383				1 hr.
4.	4	x	2.250	103	25.00	62	325				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.	25.64	22.56	96.2	1.000	1.233	Neg.	713
2.	25.64	33.86	99.2	1.001	1.233	Neg	1070
3.	25.64	43.28	106.2	1.000	1.233	Neg.	1368
4.	25.64	53.90	116.2	.9981	1.233	Neg.	1704
5.							

NO.	P_t	Temp. °R	T_t	Z
1				
2.	NEG.			
3.				
4				
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .658 | xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx
Critical Pressure: 670 P.S.I.A. | P.S.I.A.
Critical Temperature: 375 R | R

P_c 561.2 P_c^2 314.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			258.1	56.8
2			210.8	104.1
3			179.2	135.7
4			149.2	165.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.900$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.813$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.089$

Absolute Open Flow: 3,089 Mcfd @ 15.025 | Angle of Slope θ: 47.24 | Slope, n: .927

Remarks: No fluid produced during test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rick Pagan	J. B. Murray	L. C. Hudry