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: 5/20/5/24/74	
Company: Atlantic Richfield Company			Connection: El Paso Natural Gas Company		
Pool: Jalmat			Formation: Yates		Unit
Completion Date: 4/21/74	Total Depth: 3710		Plug Back TD: 3695	Elevation: 3561 DF	Farm or Lease Name: McDonald St. (WN)
Csg. Size: 4-1/2 / Wt.: 9.5 / d: 4.090 / Set At: 3710			Perforations: From 3320 To 3367		Well No.: 23
Tbg. Size: 2-3/8 / Wt.: 4.7 / d: 1.995 / Set At: 3254			Perforations: From Open To End		Unit: C / Sec.: 15 / Twp.: 22 / Rge.: 36
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 3254		County: Lea
Producing Thru: Tbg.	Reservoir Temp. °F: 88 @ 3695		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico
L: 3254 / H: 3254 / Gg: .692	% CO_2: ---	% N_2: ---	% H_2S: ---	Prover:	Meter Run: 4" / Taps: Flg.

FLOW DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					294		Pkr.		72 hr.
1.	4 x 1.750	68	4.40	67	229				24 hr.
2.	4 x 1.750	77	7.29	72	205				24 hr.
3.	4 x 1.750	88	15.20	71	183				24 hr.
4.	4 x 1.750	83	23.00	71	146				24 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	14.93	18.90	81.2	.9933	1.202	Nil	337
2	14.93	25.64	90.2	.9887	1.202	Nil	455
3	14.93	39.22	101.2	.9896	1.202	Nil	697
4	14.93	47.04	96.2	.9896	1.202	Nil	835
5							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.	NEG.			
4.				
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: None Deg.
Specific Gravity Separator Gas: .692 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 388 R ____ R

P_c 307.2 P_c^2 94.4

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			65.1	29.3
2			50.4	44.0
3			45.0	49.4
4			34.8	59.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.583$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.583$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,321$

Absolute Open Flow: 1,321 Mcfd @ 15.025 Angle of Slope θ: 45 Slope, n: 1.000

Remarks: Point alignment flat, slope of 1.000 drawn through high rate of flow.
Back Pressure Test conducted by El Paso Natural Gas Company

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