NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT A ONE POINT BACK PRESSURE TES FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-22-72	
Company: ATLANTIC RICHFIELD CO.			Connection: El Paso Natural Gas Company		
Pool: Jalmat			Formation: Yates		Unit: I
Completion Date: 5-27-72	Total Depth: 3850		Plug Back TD: 3665	Elevation: 3552	Farm or Lease Name: State 157 A
Csg. Size: 5 1/2 / Wt.: 14.0 / d: 5.012 / Set At: 3665			Perforations: From 3215 To 3407		Well No.: 4
Tbg. Size: 2 / Wt.: 4.7 / d: 1.995 / Set At: 3423			Perforations: From To		Unit: I / Sec.: 9 / Twp.: 22S / 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:	Mean Annual Temp. °F: 63	Baro. Press. – P_a: 13.2		State: New Mexico
L:	H:	Gg: .672	% CO_2:	% N_2:	% H_2S:
Prover:	Meter Run: 4"	Taps: Flg.			

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						339		339		72 hrs.
1.	4	x 2.250	58	1.00	64	316		334		1 hr.
2.	4	x 2.250	65	3.61	63	298		327		1 hr.
3.	4	x 2.250	65	16.00	62	254		302		1 hr.
4.	4	x 2.250	67	27.04	66	162		279		1 hr.
5.	4	x 2.250	69	29.70	69	105		269		1 hr.

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	8.44	71.2	.9962	1.220	Nil	263
2.	25.64	16.80	78.2	.9971	1.220	Nil	524
3.	25.64	35.37	78.2	.9981	1.220	Nil	1,104
4.	25.64	46.57	80.2	.9943	1.220	Nil	1,448
5.	25.64	49.41	82.2	.9915	1.220	Nil	1,532

NO.	P_t	Temp. °R	T_r	Z
1.				
2.				
3.		N I L		
4.				
5.				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: --- Deg.
Specific Gravity Separator Gas: .672 (Assumed) XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: P.S.I.A. P.S.I.A.
Critical Temperature: R R

P_c 352.2 P_c^2 124.0

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		347.2	120.5	3.5
2		340.2	115.7	8.3
3		315.2	99.4	24.6
4		292.2	85.4	38.6
5		282.2	79.6	44.4

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.041$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.038$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.354$

Absolute Open Flow: 3,354 Mcfd @ 15.025 Angle of Slope θ: 55.5 Slope, n: .687

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. C. Roberts	J. C. Roberts	Joe B. Murray