NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File

Form C-122
Revised 9-1-65

RECEIVED
NOV 30 1977
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 11/22/77	
Company: Atlantic Richfield Company		Connection: None			
Pool: Avalon Strawn		Formation: Strawn		Unit: I	
Completion Date: 11/21/77	Total Depth: 11,010	Plug Back TD: 10,967		Elevation: 3213.7 G.L.	Farm or Lease Name: Pecos Federal Gas Com
Csg. Size: 5½" / Wt.: 17. / d: 4.892 / Set At: 11,007		Perforations: From 9650 To 9708			Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5 / d: 2.441 / Set At: 9,553		Perforations: From Open To Ended			Unit: I / Sec.: 32 / Twp.: 20S / Rge.: 27E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 9531			County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 158 @ 9679	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
9553	9553	0.678	0.41	1.14	0.00		4"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size	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	4	2				2898	70	Pkr		24
1.	4	2	722	10	92	2783	73			1
2.	4	2	735	20	88	2691	76			1
3.	4	2	755	44	72	2519	78			1
4.	4	2	755	77	69	2325	79			1
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	19.81	85.74	735.2	0.9706	1.214	1.065	2131
2.	19.81	122.33	748.2	0.9741	1.214	1.068	3060
3.	19.81	183.85	768.2	0.9887	1.214	1.078	4712
4.	19.81	243.21	768.2	0.9915	1.214	1.081	6269
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.10	552	1.46	0.882
2.	1.12	548	1.45	0.877
3.	1.15	532	1.41	0.860
4.	1.15	529	1.40	0.856
5.				

Gas Liquid Hydrocarbon Ratio 63 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 59.6 Deg.
Specific Gravity Separator Gas 0.678 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx 0.723
Critical Pressure 669 P.S.I.A. 668 P.S.I.A.
Critical Temperature 377 R 394 R

P_c 3997.2 P_c^2 15977.6

NO	P_t^2	P_w *	P_w^2	$P_c^2 - P_w^2$
1		3874.2	15009.4	968.2
2		3771.2	14221.9	1755.7
3		3583.2	12839.3	3138.3
4		3373.2	11378.5	4599.1
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.474$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.516$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 15775$

Absolute Open Flow 15775 Mcfd @ 15.025 | Angle of Slope θ 53° 28' | Slope, n 0.741

Remarks: * BHP @ 9769' used for pressure calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James Cogburn	W. J. Needham	L. C. Hudry