NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT) ONE POINT BACK PRESSURE TES FOR GAS WELL

Form C-122
Revised 9-1-65

SF File 122

RECEIVED
OCT 18 1979
O. C. C.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 10/11/79	
Company: Amoco Production Company		Connection: Gas Company of New Mexico			
Pool: Shugart Penn		Formation: Penn		Unit	
Completion Date: 06/20/79	Total Depth: 11800	Plug Back TD: 11758	Elevation: 3654	Farm or Lease Name: Greenwood Pre-GR Unit Com	
Csg. Size: 5.500 / Wt.: 20.0 / d: 4.778	Set At: 11800.	Perforations: From 11492. To 11581 ~~11508.~~		Well No.: 12	
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995	Set At: 10972	Perforations: From ~~11566.~~ To ~~11581.~~		Unit: F / Sec.: 35 / Twp.: 18S / Rge.: 31E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10900.		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: @ 11537.	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11537.	11537.	0.653	0.55	0.58	0.	0.	4.0	Flange

	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					1985.	72.			47.0
1.	4.03 x 2.750	475.	2.2	74.	1756.	73.	0.	0.	1.0
2.	4.03 x 2.750	480.	8.4	74.	1559.	73.	0.	0.	1.0
3.	4.03 x 2.750	480.	17.6	69.	1342.	74.	0.	0.	1.0
4.	4.03 x 2.750	490.	28.1	70.	1172.	74.	0.	0.	1.0
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	41.10	33.14	488.2	0.9868	1.2375	1.0458	1739.
2.	41.10	64.40	493.2	0.9868	1.2375	1.0463	3382.
3.	41.10	93.27	493.2	0.9915	1.2375	1.0477	4927.
4.	41.10	118.89	503.2	0.9905	1.2375	1.0484	6279.
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.73	534.	1.43	0.914
2.	0.73	534.	1.43	0.914
3.	0.73	529.	1.42	0.911
4.	0.75	530.	1.42	0.910
5.				

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.

Specific Gravity Separator Gas	0.653	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	0.653
Critical Pressure	671. P.S.I.A.	671. P.S.I.A.
Critical Temperature	373. R	373. R

P_c 1971.8 P_c^2 3888.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	3130.	1749.	3058.	830.
2	2472.	1572.	2471.	1417.
3	1837.	1392.	1938.	1950.
4	1405.	1276.	1629.	2259.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7213$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7213$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 10808.$

Absolute Open Flow 10808. Mcfd @ 15.025 Angle of Slope θ 45.0 Slope, n 1.000

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	John West Engr.	C.C. Weaver	W.D. Magness

3 - NMOCD - A 1 - Hou 1 - Susp 1 - WDM 1 - DLB