NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 2-16-84	
Company: AMOCO		Connection: GAS			
Pool: UND		Formation: STRAWN			Unit: O
Completion Date: 02-07-84	Total Depth: 13670.	Plug Back TD: 13165.	Elevation: 3681.		Farm or Lease Name: NELLIS
Csg. Size: 5.500 / Wt.: 17.0 / d: 4.892 / Set At: 13499.		Perforations: From 12376. To 12384.			Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 12375.		Perforations: From 0. To 0.			Unit: O / Sec.: 6 / Twp.: 19S / Rge.: 33E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 12265.			County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 174. @ 12380.	Mean Annual Temp. °F: 60.0	Baro. Press. – P_a: 13.2		State: NEW MEXICO
L: 12380. / H: 12380.	Gg: 0.704	% CO_2: 0.17	% N_2: 2.44	% H_2S: 0.0	Prover: 0.0 / Meter Run: 4.0 / Taps: FLANGE

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					4620.	75.			
1.	4.00 X 1.375	572.	2.0	60.	2869.	56.	0.	0.	120.0
2.	4.00 X 1.375	587.	7.3	60.	1595.	56.	0.	0.	0.8
3.	4.00 X 1.375	603.	11.6	60.	1161.	56.	0.	0.	0.8
4.	4.00 X 1.375	611.	16.0	60.	797.	56.	0.	0.	0.8
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	9.07	33.87	585.2	1.0000	1.1921	1.0077	392.
2.	9.07	66.17	600.6	1.0000	1.1921	1.0716	767.
3.	9.07	84.40	616.2	1.0000	1.1921	1.0736	980.
4.	9.07	99.94	624.2	1.0000	1.1921	1.0747	1162.
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.88	520.	1.35	0.874
2.	0.90	520.	1.35	0.871
3.	0.93	520.	1.35	0.866
4.	0.94	520.	1.35	0.866
5.				

Gas Liquid Hydrocarbon Ratio: 0.0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 53.0 Deg.
Specific Gravity Separator Gas: 0.704 / XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX / 0.704
Critical Pressure: 664. P.S.I.A. / 664. P.S.I.A.
Critical Temperature: 384. R / 384. R

P_c 4620.2 P_c^2 21344.

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	8255.	2885.	8323.	10281.
2	2566.	1621.	2627.	15976.
3	1377.	1169.	1414.	17171.
4	856.	937.	1044.	17581.
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 2.0755

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.0787

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1207.

Absolute Open Flow: 1206 Mcfd @ 15.025 | Angle of Slope θ: 47.3 | Slope, n: 1.003

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
		Barbara Wagner	