

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form O-114
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-19-77	
Company AMOCO PRODUCTION COMPANY			Connection NORTHERN NATURAL GAS CO			
Pool EUMONT			Formation QUEEN			
Completion Date 5-16-77		Total Depth 4000.		Plug Back TD 3958.		
Elevation 3520.		Farm or Lease Name STATE C TRACT 11				
Csg. Size 5.500	Wt. 14.0	d 5.012	Set At 4000.	Perforations: From 3548. To 3583.		
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 3529.	Perforations: From 0. To 0.		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 3332.		
Producing Thru TUBING		Reservoir Temp. °F 96.8 3565.		Mean Annual Temp. °F 58.0		
Baro. Press. - P _a 13.2		State NEW MEXICO				
L 3565.	H 3565.	G _q 0.718	% CO ₂ 0.01	% N ₂ 0.01	% H ₂ S 0.	
Prover 0.		Meter Run 4.0		Taps PIPE		

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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	of Flow
SI							174.	62.			70.5
1.	4.00 X	1.500		107.	0.7	55.	169.	60.	0.	0.	1.0
2.	4.00 X	1.500		110.	1.5	59.	159.	60.	0.	0.	1.0
3.	4.00 X	1.500		112.	2.8	63.	144.	60.	0.	0.	1.0
4.	4.00 X	1.500		114.	4.5	66.	123.	65.	0.	0.	1.0
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1.	11.84	9.17	120.2	1.0048	1.1802	1.0150	131.
2.	11.84	13.59	123.2	1.0010	1.1802	1.0151	193.
3.	11.84	18.72	125.2	0.9971	1.1802	1.0150	265.
4.	11.84	23.92	127.2	0.9943	1.1802	1.0150	337.
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.18	515.	1.30	0.971	0.	0.	0.718	XXXXXX	667.	395.
2.	0.18	519.	1.31	0.970				XXXXXX		
3.	0.19	523.	1.32	0.971						
4.	0.19	526.	1.33	0.971						
5.										

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1.	33.	183.	33.	2.
2.	30.	174.	30.	5.
3.	25.	160.	26.	9.
4.	19.	142.	20.	15.
5.				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 2.3529$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.5372$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 519.$

Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.

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

Specific Gravity Separator Gas 0.718 XXXXXXXX

Specific Gravity Flowing Fluid XXXXXX 0.718

Critical Pressure 667. P.S.I.A. 667. P.S.I.A.

Critical Temperature 395. R 395. R

Absolute Open Flow	519.	Mcf @ 15.025	Angle of Slope	63.3	Slope, n	0.503
--------------------	------	--------------	----------------	------	----------	-------

Remarks:

Orig. Signed by Approved by Oil & Gas Division	Conducted By: Northern Natural Gas	Calculated By: DLW (Amoco)	Checked By: RMB (Amoco)
--	---------------------------------------	-------------------------------	----------------------------

RECEIVED

FEB 2 1973

OIL CONSERVATION COMM.
HOUSTON, N. M.