

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 7-20-78			
Company NATOMAS NORTH AMERICA, INC.				Connection To AIR					
Pool UNDESIGNATED				MORROW				Unit	
Completion Date 7-11-78		Total Depth 12,000'		Flow Back TD 11,600'		Elevation 4380 GR.		Farm or Lease Name STATE OF NEW MEXICO	
Plp. Size 5 1/2"	Wt. 17#	d 4.892"	Set At 11,600'	Perforations: From 10,756' To 10,764'			Well No. 1		
Tbg. Size 2 7/8"	Wt. 6.5#	d 2.441"	Set At 10,667'	Perforations: From OPEN ENDED			Unit Sec. Twp. Rge. M 19 10S 32E		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE				Packer Set At 10,667'		County LEA			
Producing Thru TUBING		Reservoir Temp. °F 182 @ 10,760'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO	
L 10760	H 10760	Gg .706	% CO ₂ 1.894	% N ₂ 1.937	% H ₂ S -0-	Prover	Meter Run 3"	Taps FLANGE	

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	
SI							2400			CHOKE	30 HRS.
1.	3"	x	1.500"	335	6"	68	1875	74		6/64	1 HR.
2.	3"	x	1.500"	340	8"	70	1520	73		7/64	1 HR.
3.	3"	x	1.500"	330	10"	69	1255	73		9/64	1 HR.
4.	3"	x	1.500"	345	22"	73	960	76		12/64	1 HR.
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	11.13	45.71	348.2	.9924	1.190	1.041	625
2	11.13	53.16	353.2	.9905	1.190	1.041	726
3	11.13	58.58	343.2	.9915	1.190	1.040	800
4	11.13	88.77	358.2	.9877	1.190	1.041	1209
5							

NO.	P _t	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	.52	528	1.35	.923	18.421	51.5 @ 60	0.7063	XXXXXX	668	392
2	.53	530	1.35	.922						
3	.51	529	1.35	.925						
4	.54	533	1.36	.922						
5										

* $P_c = 2704.5$ $P_c^2 = 7314.3$

NO.	P_c^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2260.1	5108.1	2206.2
2		1969.2	3877.7	3436.6
3		1642.9	2699.1	4615.2
4		1074.9	1155.4	6158.9
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.188$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.158$

ACTUAL Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.400$

Absolute Open Flow		1,400	Mcfd @ 15.025	Angle of Slope θ	49.5	Slope, n	.854
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Remarks: *CALCULATED FROM KNOWN B.H.P. MEASURED WITH KUSTER GAUGE @ 10,760 FEET.
WELL MADE 7.6 BBLS. CONDENSATE DURING THE TEST.

Approved By Commission: <i>John W. Kemper</i>	Conducted By: M.C.T.	Calculated By: R.R.	Checked By: J.W.W.
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RECEIVED
MAR 15 1979
CN COMMUNICATIONS
BOSTON, MASS.