

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

SP
Filer
Form C-122
Revised 9-1-66

Type Test ☒ Initial ☐ Annual ☐ Special		DATE: 11-3-79		SHUT DATE: 8-2-79	
Company Newbourne Oil Company		Connection To Air		DATE: 08-01-1979	
Field Undesignated		Formation Morrow		Unit N	
Completion Date 11/02/79		Total Depth 8363'		Flow Rate (bbl/d) 8314	
Casing Size 4 1/2"		Set At 8363'		Perforations: From 8252 To 8268	
Tubing Size 2 3/8"		Set At 8141		Perforations: From open To ended	
Type well - Single - Froesehead - G.G. or G.O. Multiple Single				Packer Set At 8241'	
Producing Thru Tog.		Reservoir Temp. °F 157		Mean Annual Temp. °F 13.2	
L 8275		H 8275		G _g .691	
				% CO ₂ .64	
				% N ₂ 14.81	
				% H ₂ S Prover	
				Meter Run 3"	
				Type Flg.	

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
1.	3 x	1.500		320	2	80	1553				74 hrs.
2.	3 x	1.500		320	4.5	68	1422				60 Min.
3.	3 x	1.500		330	8	69	1326				45 Min.
4.	3 x	1.500		315	15	69	1178				45 Min.
5.											60 Min.

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 _{sp}	Rate of Flow Q, Mhd
1.	11.13	25.81	333.2	.9813	1.203	1.024	347
2.	11.13	38.72	333.2	.9924	1.203	1.027	528
3.	11.13	52.40	343.2	.9915	1.203	1.026	714
4.	11.13	70.16	328.2	.9915	1.203	1.025	955
5.							

NO.	P _g	Temp. °R	γ _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.52	540	1.56	.954	Dry		.691	XXXXXX	643	346
2.	.52	528	1.52	.949						
3.	.53	529	1.53	.950						
4.	.51	529	1.53	.951						
5.										

P _g 1727.9 P _g ² 2985.6		(1) $\frac{P_g^2}{P_g^2 - P_w^2} = 2.127$		(2) $\left[\frac{P_g^2}{P_g^2 - P_w^2} \right]^n = 2.127$	
NO.	P _g	P _w	P _g ²	P _w ²	
1.	1974.2	1578.1	2490.4	495.2	
2.	1821.2	1458.6	2127.5	858.1	
3.	1714.2	1374.3	1888.7	1096.9	
4.	1565.2	1257.8	1582.1	1403.5	
5.					

Absolute Open Flow		2.031		Mhd @ 15,025		Angle of Slope		45		Slope, n		1.20			
Remarks: Bottom Hole shut-in 2166.2. Point alignment too flat a slope of 45 was drawn through high rate of flow.															
Approved by Commission:				Conducted by:				Calculated by:				Checked by:			
				Reston & McMurray				Reginald E. Reston							