

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

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 1122 file
 Form O-127
 Revised 9-1-65
 file

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3/24/77		SPUD DATE NOT AVAIL - 3-12-77	
Company C.E. Leane and Muncy, JR.				Connection None		RECEIVED	
Pool Undesignated Grayburg				Formation -Dromer - Grayburg		ABLE	
Completion Date 3/18/77		Total Depth 1582		Plug Back TD APR 1 1977		Unit N	
Casing Size 5 1/2		Set At 1560		Perforations: From 0 H open 1560 to 82 hole		Form or Lease Name Nola Federal	
Tubg. Size 2 3/8		Set At 1582		Perforations: From To		Well No. 3	
Type Well - Single - Brasshead - G.G. or G.O. Multiple Single				Packer Set At		County Chaves	
Producing Thr. Tbg.		Reservoir Temp. °F 6		Mean Annual Temp. °F		State New Mexico	
L		H		Gg		Prover	
		.723		% CO ₂		% H ₂ S	
				% N ₂		6" Positive Choke	

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	
51							1273		1273		72 hr.
1.	6 x 10 64			1252		69	1252		1253		4 Min.
2.	6 x 12 64			1230		69	1230		1235		45 Min.
3.	6 x 14 64			1203		69	1203		1208		1 hr.
4.	6 x 16 64			1179		70	1179		1184		1 hr.
5.	6 x 20 64			1122		70	1122		1130		30 Min.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _G	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mscf/d
1	.4173		1265.2	.9915	1.176	1.173	722
2	.6101		1243.2	.9915	1.176	1.170	1035
3	.8419		1216.2	.9915	1.176	1.168	1304
4	1.112		1192.2	.9905	1.176	1.162	1734
5	1.771		1135.2	.9905	1.176	1.154	2702

NO.	F _g	Temp. °R	T _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	1.89	529	1.33	.727					668	398
2	1.86	527	1.33	.731						
3	1.82	529	1.33	.733						
4	1.78	530	1.33	.740						
5	1.70	530	1.33	.751						

NO.	P ₁	P ₂	P ₃	P ₄ - P ₅
1	1286.2	1654.31		
2	1266.2	1603.26		51.05
3	1248.2	1558.00		96.31
4	1221.2	1491.33		162.98
5	1197.2	1433.29		221.02
5	1143.2	1366.91		347.40

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 4.762$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.093$$

$$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11.059$$

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 4-8-77

Approximate Com. Flow	11,059	Mcf/d @ 15.025	Angle of Slope	48°	Slope, n	.03
Remarks:						
Approved By Commission	Conducted By: Marshall Morris		Calculated By: Rick Pagan		Checked By:	