

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5- 7-77			
Company Union Oil Co. of California				Connection					
Pool North Quail Ridge-Morrow Gas				Formation Morrow				Unit	
Completion Date 4- 1-77		Total Depth 13,527'		Plug Back TD 13,500'		Elevation 3776' GR.		Farm or Lease Name Pipeline Deep Unit Federal	
Csg. Size 5-1/2" OD	Wt. 20#	d 4.076	Set At 13,500'	Perforations: From 13,103' To 13,461'		Well No. 3			
Tbg. Size 2-7/8" OD	Wt. 6.5#	d 2.441	Set At 12,273'	Perforations: From To		Unit Sec. Twp. Rge. G 7 19-S 34-E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12,272'		County Lea			
Producing Thru Tubing		Reservoir Temp. °F 166 @ 13,315'		Mean Annual Temp. °F		Baro. Press. - P _a 13.20 psia		State New Mexico	
L 13,315'	H 13,315'	G _g .684	% CO ₂ .42	% N ₂ .83	% H ₂ S 0.0	Prover 0.0	Meter Run 4.0	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							3164				72 Hrs.
1.	4.026 x 1.250			360	76	84	750	84	0	0	1 Hr.
2.											
3.											
4.											
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	7.47	168.41	373.2	.9777	1.2091	1.3059	1,540
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	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.	.56	544	1.42	.932	8.205 Mcf/bbl.	48.6 Deg.	.684	1.098	669 P.S.I.A.	382 R
2.										
3.										
4.										
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1		701	491	9601	1.0511	1.0511
2						
3						
4						
5						

Absolute Open Flow				Angle of Slope		Slope, n	
1,619 Mcfd @ 15.025				45.0°		1.0	

Remarks: Calculations completed using Garrett Computing System's AOF program.

Approved By Commission: <i>John W. Runyan</i>	Conducted By: L. L. Harmon	Calculated By: H. D. Schroeder	Checked By: J. G. Hawkins
--	-------------------------------	-----------------------------------	------------------------------

RECEIVED

AUG 1 1977

OIL CONSERVATION COM. N.
HOBBS, N. M.