

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

OCT 18 1976
 DIST. 3
 Form C-22
 Revised 9-1-65

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 6-30-76	
Company Union Oil Co. of California				Connection None	
Pool Basin Dakota				Formation Dakota	
Completion Date 6-28-76		Total Depth 6320'		Plug Back TD 6285'	
Elevation 6598' G.L.		Farm or Lease Name Navajo K-19			
Csg. Size 5-1/2"	Wt. 15.5#	Set At 6320'	Perforations: From 6028' To 6095'		Well No. 4
Tbg. Size 2-3/8"	Wt. 4.7#	Set At 5991'	Perforations: From None To		Unit Sec. Twp. Rge. K 19 25N 10W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 5991'	
Producing Thru Tbg.		Reservoir Temp. °F 142° @ 6319'		Mean Annual Temp. °F 50°	
Baro. Press. - P _a 12.2		State New Mexico			
L 5991'	H 5991'	G _g 0.726 (est)	% CO ₂ 0.49%	% N ₂ 1.58%	% H ₂ S 0
Prover 3"		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	7 Day S.I.						1158	-	Pkr.	-	S.I.
1.	3.0" x	1-3/4"	68	12	60°	200	-	Pkr.	-	24 Hrs.	
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	15.61	31.022	80.2	1.0	1.174	1.011	576
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.12	520	1.30	0.979	A.P.I. Gravity of Liquid Hydrocarbons	44.1 Deg.
2.					Specific Gravity Separator Gas	0.726 (est)
3.					Specific Gravity Flowing Fluid	0.9398
4.					Critical Pressure	668 P.S.I.A.
5.					Critical Temperature	400 R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.042$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.031$
1	45.0		54.6	1314.8		
2						
3						
4						
5						

Absolute Open Flow 594 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n 0.75

Remarks: Flow rate measured during testing following the frac job. Abnormal water production was encountered and is affecting well head pressures. BHP corresponding to 7-Day SIWHP = 2148 psig at 6061'.

Approved By Commission:	Conducted By: R. D. Cline	Calculated By: J. D. Roe	Checked By: J. D. Roe
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