

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 11/7/76	
Company Palmer Oil Company				Connection EPNG		
Pool Basin Dakota				Formation Dakota		Unit None
Completion Date 10/31/76		Total Depth 6909' KB		Plug Back TD 6857' KB		Elevation 5797' KB
Farm or Lease Name Federal 1						
Csg. Size 7 5/8	Wt. 14.0	d 5.012	Set At 6895	Perforations: From 6642 To 6786		Well No. 1
Thg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 6610	Perforations: From open ended		Unit Sec. Twp. Rge. I 1 31N 13W
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. Multiple				Packer Set At 6610' KB		County San Juan
Producing Thru tubing		Reservoir Temp. °F 146 @ 6895		Mean Annual Temp. °F		Baro. Press. - P _a 12 psia-est
State New Mexico						
L	H	Gg .700	% CO ₂	% N ₂	% H ₂ S	Prover
Meter Run		Taps				

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	7 days						1474				
2	2"		0.750	81			81	60			3 hrs.
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	12.3650		93	1.000	.9258	1.012	1077
2							
3							
4							
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl. A.P.I. Gravity of Liquid Hydrocarbons _____ Deg. Specific Gravity Separator Gas _____ Specific Gravity Flowing Fluid _____ Critical Pressure _____ P.S.I.A. Critical Temperature _____ °R			
1					RECEIVED NOV 11 1976 DIST. 3			
2								
3								
4								
5								

P _c 1486	P _c ² 2208196		
NO.	P _t ²	P _w	P _w ²
1	8649	195	37974
2			
3			
4			
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0175$$

$$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1091$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0131$$

Absolute Open Flow 1091 Mcfd @ 15.025		Angle of Slope θ _____	Slope, n .75
--	--	-------------------------------	---------------------

Remarks: Pressure calculations: $P_t = 93$, $F_c Q = 10.126$, $(F_c Q)^2 = 102.536$
 $(F_c Q)^2 (1 - e^{-s}) = 29.325$

Approved By Commission:	Conducted By: Harold W. Elledge	Calculated By: Joe F. Elledge	Checked By: Harold W. Elledge
-------------------------	---	---	---