

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 9/3/81	
Company HNG Oil Company		Connection None	
Pool Undesignated		Formation Morrow	
Completion Date 8/30/81		Total Length 14744'	Plug Back TD 14640'
		Elevation 3680' GL	Form or Lease Name Sims 35 State
Cog. Size 4 1/2"	Wt. 13.5	Set At 3.920	14723
Perforations: From 12963' To 13192'		Well No. 1	
Trg. Size 2 7/8"	Wt. 6.5	Set At 2.441	12003
Perforations: Open Ended From To		Unit B	Sec. 35
Type Well - Single - Brazenhead - G.G. or G.O. Multiple Single		Packer Set At 12003	Twp. 20s
Producing Thru Tubing		Reservoir Temp. °F 195° 13077	Mean Annual Temp. °F 60
Baro. Press. - P _a 13.2		State New Mexico	
L 13077	H -	G _g 0.6260	% CO ₂ 0.468
% N ₂ 0.417		% H ₂ S -	Prover -
Meter Run 6"		Taps F	

FLOW DATA									
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA
							Press. p.s.i.g. DWT	Temp. °F	Press. p.s.i.g.
1.	6	6/64	1.750	460	7	93	5379	60	PACKER
2.	6	7.5/64	1.750	480	15	92	5189		
3.	6	9/64	1.750	480	30	90	5009		
4.	6	11.5/64	1.750	500	61	84	4832		
5.							4573		
									Duration of Flow
									96.0 hrs.
									1.0 hrs
									1.0 hrs
									1.0 hrs
									0.75 hrs

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1.	14.61	57.55	473.2	0.9697	1.264	1.034	1065.62
2.	14.61	86.01	493.2	0.9706	1.264	1.036	1597.15
3.	14.61	121.64	493.2	0.9723	1.264	1.037	2264.92
4.	14.61	176.93	513.2	0.9777	1.264	1.039	3319.10
5.							

NO.	F _r	Temp. °R	T _r	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.	0.70	553	1.53	0.935	49.4	0.626			674	361
2.	0.73	552	1.53	0.932						
3.	0.73	550	1.52	0.930						
4.	0.76	544	1.51	0.926						
5.										

P _c 7222.2 P _c ² 52160.2		$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 10.9714$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.786$	
NO.	P _w	P _w ²	P _c ² - P _w ²		
1	7022.2	49311.3	2848.9		
2	6885.2	47406.0	4754.2		
3	6717.2	45120.8	7039.4		
4	6443.2	41514.8	10645.4		
5					

Absolute Open Flow 14032		Angle of Slope 47° 47'		Slope, n 0.907	
Remarks: * BOTTOM HOLE PRESSURE @ (-9397) 13077' USED FOR PRESSURE CALCULATIONS 3.0 BD in 3.75 hours = 19.2 BD/D					
Approved By Commission:		Conducted By:		Calculated By:	