

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

Copy 6051-
C-122
Form C-122
Revised 9-1-65

RECEIVED

SEP 4 1975

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-26-75							
Company Hanagan Petroleum Corporation						Connection None				O.C.C. ARTESIA, OFFICE			
Pool Catclaw Draw Unit						Formation Morrow				Unit Catclaw Draw			
Completion Date 9/2/75			Total Depth 11170			Plug Back TD 10985		Elevation 3704 KB		Farm or Lease Name Catclaw Draw Unit			
Csg. Size 5.5		Wt. 17 & 20		d 4.892 4.778		Set At 11170		Perforations: From 10935 To 10974		Well No. 11			
Tbg. Size 2 7/8		Wt. 6.5		d 2.441		Set At 10792		Perforations: From To		Unit L		Sec. Twp. Rge. 36 21S 25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10792-796				County Eddy			
Producing Thru Tubing			Reservoir Temp. °F 178 @ 10785			Mean Annual Temp. °F 70			Baro. Press. - P _a 13.2			State New Mexico	
L 10905		H 10905		Gg 0.600		% CO ₂		% N ₂		% H ₂ S		Prover Pos ck	
												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
SI	94 hrs.			3278			3278		Pkr		
1.	2"	X	8/64	3054		81	3054		"		60 min.
2.	2"	X	9/64	2933		83	2933		"		60 min.
3.	2"	X	11/64	2706		85	2706		"		60 min.
4.	2"	X	13/64	2448		86	2448		"		60 min.
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	0.2618		3067.2	0.9804	1.291	1.120	1138.3
2	0.3346		2946.2	0.9786	1.291	1.122	1397.4
3	0.5090		2719.2	0.9768	1.291	1.129	1970.5
4	0.7208		2461.2	0.9759	1.291	1.129	2523.4
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	4.57	541	1.51	0.797	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	4.39	543	1.52	0.795	Specific Gravity Separator Gas 0.600 XXXXXXXXXX
3	4.05	545	1.52	0.785	Specific Gravity Flowing Fluid XXXXXX
4	3.67	546	1.53	0.785	Critical Pressure 671 P.S.I.A. P.S.I.A.
5					Critical Temperature 358 R R

$P_f^2 = 4280.2$ $P_s^2 = 18320$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.3838646$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.957813$	
NO.	P _f ²	P _s ²	P _s ²	P _f ² - P _s ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4940.3$			
1		4005.2	16042	2278				
2		3849.2	14816	3504				
3		3572.2	12761	5559				
4		3261.2	10635	7685				
5								

Absolute Open Flow 4940.3 Mcfd @ 15.025		Angle of Slope @ 52° 17'		Slope, n 0.773353	
Remarks: BHP measured with Amerada RPG-3 gauge Serial No. 9383 0-6050					
Approved By Commission:		Conducted By: Tefteller, Inc.		Calculated By: F. Tefteller	
				Checked By:	