

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

Form C-122
Revised 9-1966

DEC 8 1972

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 11-29-72			
Company Hanagan Petroleum Corp.				Connection Waiting on pipeline connection		ARTESIA OFFICE	
Pool Catclaw Draw				Formation Morrow		Unit Catclaw Draw	
Completion Date 12/7/72		Total Depth 10512		Plug Back TD 10451		Elevation 3303 KB	
Farm or Lease Name Catclaw Draw Unit		Well No. 7		Perforations: 10372 to 10377 From 10380 To 10386			
Csg. Size 5 1/2		Wt. 17#		Set At 4.892		10512	
Tbg. Size 2 7/8		Wt. 6.5		Set At 2.441		9986	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9998		County Eddy	
Producing Thru 2 7/8" Tbg		Reservoir Temp. °F 173 @ 9900		Mean Annual Temp. °F 65		Baro. Press. - P _g 13.2	
State New Mexico		Prover Pos. Ck.		Meter Run		Taps	
L 10403		H 10403		G _g 0.585		% CO ₂	
						% N ₂	
						% H ₂ S	

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	Positive Choke			3389			3389		Pkr.		
1.	2"	X	10/64	2895			2895	74			60 min.
2.	2"	X	13/64	2575			2575	74			60 min.
3.	2"	X	16/64	2504			2504	70			60 min.
4.	2"	X	20/64	2124			2124	68			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	0.4173		2908.2	0.9868	1.307	1.122	1756.2
2	0.7208		2588.2	0.9868	1.307	1.129	2716.5
3	1.112		2517.2	0.9905	1.307	1.131	4098.4
4	1.771		2137.2	0.9924	1.307	1.132	5557.4
5							

NO.	P _t	Temp. °F	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	Used Simplified				Specific Gravity Separator Gas 0.585 XXXXXXXXXX
3.	Supercompressibility Tables				Specific Gravity Flowing Fluid XXXXX
4.					Critical Pressure 675.7 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 353.4 °F _____ °F

P _f 4280.2	P _s 18,320	
NO.	P _t ²	P _s ²
1	3714.2	13795
2	3355.2	11257
3	3349.2	11217
4	2859.2	8175
5		

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{4280.2^2}{4280.2^2 - 18320^2}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \left[\frac{4280.2^2}{4280.2^2 - 18320^2} \right]^n$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \left[\frac{4280.2^2}{4280.2^2 - 18320^2} \right]^n$

NO.
 P_t² | P_s² | P_f² - P_s² || 1 | 3714.2 | 13795 | 4525 |
2	3355.2	11257	7063
3	3349.2	11217	7103
4	2859.2	8175	10145
5			

Absolute Open Flow	9200	Mcf @ 15.025	Angle of Slope @	50° 3'	Slope, n	0.83759
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Remarks: Substantial cleanup occurred during 3rd rate
BHP measured with Amerada RPG-3 gauge.

Approved By Commission:	Conducted By: Tefteller, Inc.	Calculated By: F. Tefteller	Checked By:
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