N. MEXICO OIL CONSERVATION COMMISSION

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

RECEIVED
AUG 10 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 7-30-72	
Company: Hanagan Petroleum Corp.	Connection: Llano Incorporated		
Pool: Catclaw Draw Morrow	Formation: Morrow		Unit: Catclaw Draw
Completion Date: 8-7-72	Total Depth: 10933	Plug Back TD: 10893	Elevation: 3468 GL
Farm or Lease Name: Catclaw Draw Unit			
Csg. Size: 5 1/2 / Wt.: 17# / d: 4.892 / Set At: 10933	Perforations: From 10810 To 10826		Well No.: 3
Tbg. Size: 2 3/8 / Wt.: 4.70# / d: 1.995 / Set At: 10409	Perforations: From To		Unit: D / Sec.: 36 / Twp.: 21S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G.G. Multiple (Strawn/Morrow)	Packer Set At: 10409		County: Eddy
Producing Thru: 5½" Casing	Reservoir Temp. °F: 164 @ 9400	Mean Annual Temp. °F: 70	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10818	10818	0.610				Pos. Ck		

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI			3254			3254		Pkr		
1.	2"	x 8/64"	3019		74	3019	74			1 hr
2.	2"	x 10/64"	2682		72	2682	72			1 hr.
3.	2"	x 13/64"	2278		70	2278	70			1 hr.
4.	2"	x 16/64"	1959		70	1959	70			1 hr.
5.										

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	0.2618		3032.2	0.9867	1.291	1.132	1144.7
2.	0.4173		2695.2	0.9887	1.291	1.149	1649.5
3.	0.7208		2291.2	0.9905	1.291	1.159	2447.6
4.	1.1120		1972.2	0.9905	1.291	1.152	3230.6
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	4.52	534	1.48	0.780
2.	4.02	532	1.47	0.758
3.	3.41	530	1.46	0.745
4.	2.94	530	1.46	0.753
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.610 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 671 P.S.I.A. _____ P.S.I.A.
Critical Temperature 362 R _____ R

P_f 4427.2 P_f^2 19600

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		4012.2	16098	3502
2		3775.2	14252	5348
3.		3167.2	10031	9569
4		2779.2	7724	11876
5				

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

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

Absolute Open Flow 5000 Mcfd @ 15.025 Angle of Slope θ 49° 38' Slope, n 0.8499

Remarks: BHP measured with Amerada RPG-3 gauge.

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