N. M. O. C. COM

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
AUG 18 1972
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8-8-72	
Company: Hanagan Petroleum Corporation			Connection: Llano Gas Company		
Pool: Catclaw Draw			Formation: Morrow		Unit: Catclaw Draw Unit
Completion Date: 8-14-72	Total Depth: 10770		Plug Back TD: 10701	Elevation: 3375 GL	Farm or Lease Name: Catclaw Draw Unit
Csg. Size: 5 1/2	Wt.: 17-20#	d: 4.892 / 4.778	Set At: 10770	Perforations: From 10633 To 10698	Well No.: 4
Tbg. Size: 2 7/8	Wt.: 6.5#	d: 2.441	Set At: 10584	Perforations: From To	Unit: G; Sec.: 24; Twp.: 21S; Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 10584		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 179 @ 10500		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
10666	10666	0.600				Pos. Ck.		

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size	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			3506			3506		Pkr.		
1.	2"	8/64"	3132		70	3132	70	"		1 hr.
2.	2"	10/64"	2980		70	2980	70	"		1 hr.
3.	2"	13/64"	2677		70	2677	70	"		1 hr.
4.	2"	16/64"	2456		70	2456	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		3145.2	0.9905	1.291	1.127	1186.9
2.	0.4173		2993.2	0.9905	1.291	1.134	1811.6
3.	0.7208		2690.2	0.9905	1.291	1.144	2837.2
4.	1.1120		2469.2	0.9905	1.291	1.148	4031.6
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	4.69	530	1.48	0.788
2.	4.46	530	1.48	0.777
3.	4.01	530	1.48	0.764
4.	3.68	530	1.48	0.759
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: 0.600 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 671 P.S.I.A. P.S.I.A.
Critical Temperature: 358 R R

P_f 4434.2 P_f^2 19662

NO	P_t^2	P_s	P_s^2	$P_f^2 - P_s^2$
1		3979.2	15834	3828
2		3812.2	14533	5129
3		3453.2	11925	7737
4		3192.2	10190	9472
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 = $

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ARTESIA, NEW MEXICO

Absolute Open Flow: 8600 Natural Mcfd @ 15.025 | Angle of Slope θ: 45° * | Slope, n: 1.000

Remarks: BHP measured with Amerada RPG-3 gauge.
* well continued to clean up throughout test.

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