NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 12-1-65

RECEIVED
MAY 17 1985
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 5-10-85	
Company: Hondo Oil and Gas Company	Connection: None		
Pool: ~~Wildcat~~ Cabin Lake Morrow	Formation: Morrow		Unit
Completion Date: 5-8-85	Total Depth: 11,600	Plug Back TD: 11,547	Elevation: 3580.6 GR
Farm or Lease Name: State CE			
Csg. Size: 5½"	Wt.: 17# / 15.5#	d: 4.892 / 4.950	Set At: 11,700
Perforations: From 11,241 To 248	Well No.: 1		
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 11,165
Perforations: From 11,255 To 256	Unit: F	Sec.: 2	Twp.: 18S
Rge.: 30E			
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 11,165	County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 164.5 @ 11,244	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11,165	11,165	.669	.320	.628	0		4"	Flg.

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							3315		Pkr.		SI 87 Hrs.
1.	4	x	.750	408	4.5	97	2904	78	Pkr.		1 Hr.
2.	4	x	.750	385	9.2	103	2685	79	Pkr.		1 Hr.
3.	4	x	.750	417	14.1	96	2491	77	Pkr.		1 Hr.
4.	4	x	.750	426	21	85	2359	74	Pkr.		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	2.661	43.54	421.2	.9662	1.223	1.034	141.5
2.	2.661	60.53	398.2	.9610	1.223	1.032	195.4
3.	2.661	77.88	430.2	.9671	1.223	1.035	253.7
4.	2.661	96.04	439.2	.9768	1.223	1.040	317.5
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.63	557	1.49	.935
2.	.60	563	1.50	.939
3.	.64	556	1.48	.934
4	.66	545	1.45	.925
5.				

Gas Liquid Hydrocarbon Ratio 26.886 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55.92 @ 60° Deg.
Specific Gravity Separator Gas .669 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. ____ P.S.I.A.
Critical Temperature 375 R ____ R

* P_c 4889.2 P_c^2 23904.3

NO	P_t^2	* P_w	P_w^2	$P_c^2 - P_w^2$
1		4407.2	19423.4	4480.9
2		4164.2	17340.6	6563.7
3		3909.2	15281.8	8622.5
4		3608.2	13019.1	10885.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.196$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.126$

Post ID-2
6-21-85
comp w BH

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 675$

Absolute Open Flow 675 Mcfd @ 15.025 Angle of Slope θ 46° 11' Slope, n .959

Remarks: *Bottom hole pressure @ 11,244' via bomb (mid perfs)
Fluid produced in 4th rate only 1.4 bbls. cond. and .4 bbls. water.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. Cogburn	J. Cogburn	L. Sutton