NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JUN 5 19..
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special			Test Date: 5-29-79	
Company: Hondo Oil & Gas Company ✓	Connection: Not connected			
Pool: Undesignated	Formation: Atoka			Unit
Completion Date: 4-30-79	Total Depth: 11,140	Plug Back T.D.: 10,687	Elevation: 3382' GR	Farm or Lease Name: State CB Com
Csg. Size: 4.5 / Wt.: 11.6 / d: 4.00 / Set At: 11,140		Perforations: From 10,324 To 10,354		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 10,250		Perforations: From Open To Ended		Unit: O / Sec.: 29 / Twp.: 19S / Rge.: 28E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 10,250		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 175 @ 10,339	Mean Annual Temp. °F: 60°F	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10,250	10.250	0.6517	0.288	0.724	-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	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2784	76	PKR		SI 158 Hrs
1.	4" x 1"	300	5	100	2384	77			1 Hr
2.	4" x 1"	305	16.6	104	2274	78			1 Hr
3.	4" x 1"	310	20.0	97	2206	80			1 Hr
4.	4" x 1"	315	32.0	99	2074	80			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	4.753	39.57	313.2	.9636	1.238	1.024	230
2	4.753	63.07	318.2	.9602	1.238	1.024	420
3.	4.753	80.40	323.2	.9662	1.238	1.025	469
4.	4.753	102.48	328.2	.9645	1.238	1.025	596
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.47	560	1.51	.953
2.	.47	564	1.52	.954
3.	.48	557	1.50	.951
4.	.49	559	1.51	.951
5.				

Gas Liquid Hydrocarbon Ratio: 34.583 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 56.1 Deg.
Specific Gravity Separator Gas: .652 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 0.736
Critical Pressure: 673 P.S.I.A. 671 P.S.I.A.
Critical Temperature: 371 R 397 R

*P_c 3799.2 P_c^2 14433.9

NO	P_t^2	* P_w	P_w^2	$P_c^2 - P_w^2$
1		3369.2	11351.5	3082.4
2		3325.2	11057.0	3376.9
3		3267.2	10674.6	3759.3
4		3126.2	9773.1	4660.8
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.0968$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.0968$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,845$

Absolute Open Flow: 1845 Mcfd @ 15.025 Angle of Slope θ: 45° Slope, n: 1.00

Remarks: * BHP measured at mid-point of perfs 10,339
Produced 2 bbls. distillate during test

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	C. Johnson	J. Cogburn	L. C. Hudry