NEW MEXICO OIL CONSERVATION C MISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
FEB 24 1978
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 2-20-78	
Company: H.N.G. Oil Co.		Connection: None			
Pool: ~~Pic Nego~~ West Malaga Morrow		Formation: Morrow		Unit:	
Completion Date: 2-20-78	Total Depth: 12,752	Plug Back TD: 12,670	Elevation: 3024.36 GL	Farm or Lease Name: Woods 9 Com	
Csg. Size: 4½ / Wt.: 18# / d: / Set At: 12,752		Perforations: From 12380 To 12578		Well No.: 1	
Tbg. Size: 2 7/8 / Wt.: 6.5 / d: / Set At: 10,100		Perforations: From To		Unit: J / Sec.: 9 / Twp.: 24S / Rge.: ~~24E~~ 28	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: Seal Assembly		County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: 213@ 12,480	Mean Annual Temp. °F: 68	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 10,100	H: 10,100	Gg: .63	% CO_2: None	% N_2: None	% H_2S: None
Prover:	Meter Run: 3.068	Taps: Pipe			

NO.	FLOW DATA: Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						4060				
1.	3.068	1.50	115	2.0	75	3269	73			60 Min.
2.	3.068	1.50	190	5.0	90	2672	73			60 Min.
3.	3.068	1.50	308	19.2	96	2170	72			60 Min.
4.	3.068	1.50	600	33.0	80	2122	74			60 Min.
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	12.94	16.01	128.2	.9859	1.260	1.011	260
2.	12.94	31.87	203.2	.9723	1.260	1.016	513
3.	12.94	78.53	321.2	.9671	1.260	1.025	1269
4.	12.94	142.25	613.2	.9813	1.260	1.056	2403
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.20	535	1.45	.978
2.	.30	550	1.50	.969
3.	.48	556	1.51	.951
4.	.92	540	1.47	.897
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: None Deg.
Specific Gravity Separator Gas: .63 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 670 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 368 R ____ R

P_c 5452.2 P_c^2 29726

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		4515.2	20387	9339
2		3811.2	14525	15201
3		3375.7	11392	18334
4		3120.2	9736	19990
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.487$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.487$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3573$

Absolute Open Flow: 3573 Mcfd @ 15.025 Angle of Slope θ: 45° Slope, n: 1.0

Remarks: PW substituted for Pt - Measured with Amerada Instrument No. 33109 - 0-7000# Element

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Morgan	Spruell	Pyle