C-5F

Form C-122
Revised 9-1-65

[N]EW MEXICO OIL CONSERVATION COM[MIS]SION
MULTIPOINT AND ONE POINT BACK PRESSURE TE[ST] FOR GAS WELL

RECEIVED

JUL 14 1980

O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial	[ ] Annual	[ ] Special	Test Date: 6-30-80
Company: HNG Oil Company	Connection: El Paso Natural Gas Company		Unit: J
Pool: ~~Undesignated~~ West Malaga (Atoka)	Formation: Atoka		Farm or Lease Name: Woods 9 COM
Completion Date: 6-24-80	Total Depth: 12752	Plug Back TD: 11483	Elevation: 3024.3
Well No.: 1			

Csg. Size	Wt.	d	Set At	Perforations: From	To
7"	23.0	6.366	10250	11279	11380
4-1/2"	12.7	3.958	9930-12752		

Tbg. Size	Wt.	d	Set At	Perforations: From	To
2-3/8"	6.5	2.441	9930	Open	ended

Unit	Sec.	Twp.	Rge.
J	9	24S	28E

Type Well — Single — Bradenhead — G.G. or G.O. Multiple: Single

Packer Set At: 9930

County: Eddy

State: New Mexico

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. — P_a	Prover	Meter Run	Taps
Tbg.	187 @ 11329	60	13.2		4"	Flange

L	H	Gg	% CO_2	% N_2	% H_2S
11375	11375	.628	.22	.74	.12

NO.	Prover Line Size	x	Orifice Size	Flow 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							5761				72 hr.
1.	4	x	1.500	283	4.40	97	5640				1 hr.
2.	4	x	1.500	291	25.00	92	5314				1 hr.
3.	4	x	1.500	299	56.20	56	4750				1 hr.
4.	4	x	1.500	315	86.00	58	4130				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	10.84	36.10	296.2	.9662	1.262	1.022	488
2.	10.84	87.21	304.2	.9706	1.262	1.023	1185
3.	10.84	132.46	312.2	1.004	1.262	1.030	1874
4.	10.84	168.00	328.2	1.002	1.262	1.031	2374
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.44	557	1.53	.958
2.	.45	552	1.51	.955
3.	.47	516	1.41	.942
4.	.49	518	1.42	.940
5.				

Gas Liquid Hydrocarbon Ratio: None Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: ______ Deg.
Specific Gravity Separator Gas: .628 | xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx
Critical Pressure: 671 P.S.I.A. | ______ P.S.I.A.
Critical Temperature: 365 R | ______ R

* P_c 5957.2 P_c^2 25488.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	7102.2	5785.4	33470.9	2017.3
2	6763.2	5478.9	30018.3	5469.9
3	6154.2	4930.3	24308.9	11179.3
4	5463.2	4323.1	18689.2	16799.0
** 5	7289.2			

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 2.113

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.603

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 3,805

Absolute Open Flow: 3,805 Mcfd @ 15.025

Angle of Slope θ: 57.75°

Slope, n: .631

Remarks: * All pressures obtained from Bottom hole bomb set @ 11375.
* Bottom hole shut-in pressure.
Made no fluid during test.

Approved By Commission: ______
Conducted By: Otis Testing Service
Calculated By: Bob McMurrain
Checked By: ______

Posted ID-2 / API-10 / 7-18-80