c15.F File

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-1
Revised 4-1-65

RECEIVED BY
MAY 3 1 1985
O. C. D.
ARTESIA, OFFICE

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 5/12/85	
Company: HNG OIL COMPANY		Connection: EL PASO PIPELINE		Unit: G
Pool: White City PENN		Formation: PENN		
Completion Date: 7/9/84	Total Depth: 11875	Plug Back T.D.: 11825	Elevation: 3296.6 GR	Farm or Lease Name: WHITE CITY 14 FED
Csg. Size: 4.500 / Wt.: 13.5 / d: 3.920 / Set At: 11825		Perforations: From 11527 To 11631		Well No.: 1
Tbg. Size: 2.375 / Wt.: 4.7 / d: 1.995 / Set At: 9007		Perforations: From 0 To 0		Unit: G / Sec.: 14 / Twp.: 25S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 9007		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 232 @ 11579	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
11579	11579	0.572	0.91	0.61	0	0	4.0	FLANGE

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	BHP DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							2806		3654	232	73.5
1.	4.03		1.125	355	5.0	99	2634		3454	232	1.0
2.	4.03		1.125	365	24.0	87	2419		3193	232	2.2
3.	4.03		1.125	375	44.0	88	2246		2994	232	1.2
4.	4.03		1.125	390	63.0	85	2097		2819	232	1.2
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	6.03	42.91	368.2	0.9645	1.3222	1.0216	337
2	6.03	95.27	378.2	0.9750	1.3222	1.0243	759
3	6.03	130.69	388.2	0.9741	1.3222	1.0247	1040
4	6.03	159.38	403.2	0.9768	1.3222	1.0262	1274
5							

NO.	P_t	Temp. °R	T_f	Z
1	0.54	559	1.61	0.958
2	0.56	547	1.58	0.953
3	0.57	548	1.58	0.952
4	0.60	545	1.57	0.950
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas 0.572 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.572
Critical Pressure 677 P.S.I.A. 677 P.S.I.A.
Critical Temperature 347 R 347 R

P_c 2901.9 P_c^2 8421

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	12021	2738	7498	923
2	10280	2527	6386	2035
3	9043	2368	5606	2814
4	8021	2229	4969	3452
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4395$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.4395$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3108$

Absolute Open Flow 3108 Mcfd @ 15.025 Angle of Slope @ 45 Slope, n 1.000

Remarks: NO CHOKE SIZES RAN WITH ACTUATER ON PRODUCTION UNIT
BHP MEASURED WITH AMARADA RPG3# GAUGES

Approved By Commission	Conducted By	Calculated By	Checked By
	BENNETT & CATHEY	RICHARD TOWNLEY	5/29/85 Betty Gildon