N[illegible]XICO OIL CONSERVATION COMM[illegible]N

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special		Test Date: 11-7-85	
Company: ROBERT N. ENFIELD	Connection: TO AIR		
Pool: WILDCAT	Formation: ATOKA		Unit:
Completion Date: 11-6-85	Total Depth: 10783'	Plug Back TD: 9586	Elevation: 4277
Farm or Lease Name: CARSON FEDERAL			
Csg. Size: 4.5 / Wt.: 11.6 / d: / Set At: 9670	Perforations: From 9403 To 9426	Well No.: 1	
Tbg. Size: 2.375 / Wt.: 4.7 / d: / Set At: 9351	Perforations: From 0 To 0	Unit: — Sec.: 3 Twp.: 9S Rge.: 31E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: 9351	County: CHAVES	
Producing Thru: TUBING	Reservoir Temp. °F: 188@ 9414	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
9414	9414	0.847	0.82	32.09	0	0	4.0	FLANGE

	FLOW DATA				TUBING DATA		B-H.P.		
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.	Duration of Flow
SI							2804	188	72.0
1.	4.03 X 1.000	210	4.0	84			2433	188	1.0
2.	4.03 X 1.000	210	7.0	90			2248	188	1.0
3.	4.03 X 1.000	215	11.0	92			2066	188	1.0
4.	4.03 X 1.000	200	18.0	94			1855	188	1.0
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	4.75	29.88	223.2	0.9777	1.0868	1.0164	153
2.	4.75	39.53	223.2	0.9723	1.0868	1.0156	202
3.	4.75	50.10	228.2	0.9706	1.0868	1.0157	255
4.	4.75	61.95	213.2	0.9688	1.0868	1.0144	314
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	0.37	544	1.57	0.968
2.	0.37	550	1.59	0.969
3.	0.38	552	1.59	0.969
4.	0.35	554	1.60	0.972
5.				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.

Specific Gravity Separator Gas	0.847	XXXXXXXXX
Specific Gravity Flowing Fluid	XXXXX	0.847
Critical Pressure	608 P.S.I.A.	608 P.S.I.A.
Critical Temperature	347 R	347 R

P_c 2079.8 P_c^2 4325

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		1805	3259	1067
2		1670	2791	1535
3		1539	2368	1957
4		1386	1921	2404
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7992$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7813$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 559$

Absolute Open Flow 559 Mcfd @ 15.025 Angle of Slope θ 45.5 Slope, n .983

Remarks:

Approved By Commission: APR 1986 Conducted By: BENNETT & CATHEY Calculated By: RICHARD TOWNELY Checked By: