STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87504

NOV 18 1994

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 10-7-1994				
Company: Barbara Fasken			Connection: Pipeline					
Pool: Indian Basin			Formation: Strawn				Unit:	
Completion Date: 9-28-1994	Total Depth: 8980		Plug Back TD: 8941		Elevation: 3856 G.L.		Farm or Lease Name: Durham Shell Fed	
Csg. Size: 4.5	Wt.: 11.6	d: 4.000	Set At: 8980	Perforations: From 8525	To 8892		Well No.: #1	
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 8390	Perforations: From -	To --		Unit: — Sec.: 8 Twp.: 21s Rge.: 24e	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single (gas)				Packer Set At: 8358			County: Eddy	
Producing Thru: Tbg. (gas)	Reservoir Temp. °F: 147 @ 8709		Mean Annual Temp. °F: 60		Baro. Press. – P_a: 13.2		State: New Mexico	
L: 8709	H: 8709	Gg: 0.637	% CO_2: 4.144	% N_2: 0.598	% H_2S: 0.00	Prover: 0.00	Meter Run: 3.0	Taps: Flg.

FLOW DATA / TUBING DATA / BHP DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	BHP Press. p.s.i.g.	BHP Temp. °F	Duration of Flow
SI							2522	60	3213	147	72.0
1.	3.0	x	1.0	7.65	1.7	110	2332	60	2986	147	1.0
2.	3.0	x	1.0	7.7	2.25	110	2130	60	2800	147	1.0
3.	3.0	x	1.0	7.7	2.6	100	1910	60	2569	147	1.0
4.	3.0	x	1.0	7.7	3.4	100	1530	60	2167	147	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	24.5	13.01	850	0.9551	1.253	1.055	402
2.	24.5	17.33	850	0.9551	1.253	1.055	536
3.	24.5	20.02	850	0.9636	1.253	1.059	627
4.	24.5	26.18	850	0.9636	1.253	1.059	820
5.							

NO.	P_t	Temp. °R	T_t	Z
1	1.24	570	1.57	0.899
2.	1.24	570	1.57	0.899
3.	1.24	560	1.54	0.891
4.	1.24	560	1.54	0.891
5				

Gas Liquid Hydrocarbon Ratio 24.3 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ____ Deg.
Specific Gravity Separator Gas 0.637 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 687 P.S.I.A. ____ P.S.I.A.
Critical Temperature 363 R ____ R

P_c 3226 P_c^2 10.41 x 10^6

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		2999	8.99	1.413
2		2813	7.91	2.494
3		2582	6.67	3.741
4		2180	4.75	5.655
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.17$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.05$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1098$

NOV 18 '94

Absolute Open Flow 1098 Mcfd @ 15.025 | Angle of Slope θ ____ | Slope, n 0.502

Remarks: Bottom hole pressures obtained from pressure bombs hung @ mid-perf

Approved By Division	Conducted By:	Calculated By:	Checked By:
	KELTIC SERVICES	JIM SMITH	