Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Harvey E. Yates Company		Lease or Unit Name: Travis "ATR" 24 State Com	
Type Test: X Initial ☐ Annual ☐ Special		Test Date: 9-17-97	Well No.: 1
Completion Date: 9-11-97	Total Depth: 11,260	Plug Back TD: 10,890	Elevation: 3493' GL
Unit Ltr. - Sec. - TWP - Rge.: K 24 18s 28e			

Csg. Size	Wt.	d	Set At	Perforations	County
5½	17#	4.892	11,260	From: 10,788 To: 10,818	Eddy

Tbg. Size	Wt.	d	Set At	Perforations	Pool
2 3/8	4.7#	1.995	10,631	From: OPEN To: ENDED	Empire Morrow South

Type Well - Single - Bradenhead - G.G. or G.O. Multiple	Packer Set At	Formation
Single	10,631	Morrow

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press - P_a	Connection
Tbg	180 @ 10631	60°	13.2	GPM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
10631	10631	0.655	0.55	0.38			4.026	FLG

	FLOW DATA				TUBING DATA		CASING DATA		
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. °F	Duration of Flow
SI					3181		PACKER		30 Min.
1.	4.026 x 2.250	753	1.8	84	3126				1 Hr.
2.	4.026 x 2.250	758	9.8	77	2931				1 Hr.
3.	4.026 x 2.250	773	18.5	79	2750				1 Hr.
4.	4.026 x 2.250	782	28.1	77	2547				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, F pv.	Rate of Flow Q, Mcfd
1.	25.64	37.14	766.2	.9777	1.236	1.069	1230
2.	25.64	86.94	771.2	.9840	1.236	1.073	2904
3.	25.64	120.60	786.2	.9822	1.236	1.075	4036
4.	25.64	149.48	795.2	.9840	1.236	1.076	5016
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	1.14	544	1.45	.875
2.	1.15	537	1.43	.868
3.	1.17	539	1.43	.865
4.	1.18	537	1.43	.863
5.				

Gas Liquid Hydrocarbon Ratio 34.884 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55 @ 60 Deg.
Specific Gravity Separator Gas 0.655 XXXXXXXXX
Specific Gravity Flowing Fluid 550 XXXXX GMIX = .739
Critical Pressure 670 P.S.I.A. 668 P.S.I.A.
Critical Temperature 375 R 401 R

P_c 3194.2 P_c^2 10202.9

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		3147.5	9906.9	296.0
2.		2992.1	8952.9	1250.0
3.		2858.9	8173.1	2029.9
4.		2714.2	7366.7	2836.2
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.597$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.220$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 11,136$

Absolute Open Flow 11,136 Mcfd @ 15.025 Angle of Slope θ 58.07 Slope, n 0.6230

Remarks: Well produced 15.75 BBLS/Condensate during test
Shut in tubing pressure stabilized in 30 minutes

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Jarrel Services, Inc.	Bob Murray	Bob Murray