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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

AUG 30 1991
O. C. D.
ARTESIA OFFICE

Form C-122
Revised 4-1-91

C/S F. File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Enron Oil & Gas Company						Lease or Unit Name: Malaga 36 State			
Type Test: [X] Initial [ ] Annual [ ] Special						Test Date: 8-26-91		Well No.: 1	
Completion Date: 3-15-91		Total Depth: 12150		Plug Back TD: 12058		Elevation: 2973' GL		Unit Ltr. - Sec. - TWP - Rge.: J 36 23S 28E	
Csg. Size: 4½	Wt.: 15.10	d: 3.826	Set At: 12150	Perforations: From: 12032	To: 12036			County: Eddy	
Tbg. Size: 2 7/8	Wt.: 6.5	d: 2.441	Set At: 10225	Perforations: From: OPEN	To: ENDED			Pool: South Culebra Bluff	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single				Packer Set At: 10225				Formation: Atoka	
Producing Thru: Tbg.	Reservoir Temp. °F: 194 @ 12032	Mean Annual Temp. °F: 60		Baro. Press - P_a: 13.2				Connection:	
L: *12032	H: *12032	Gg: .585	% CO_2: .38	% N_2: 1.24	% H_2S:	Prover:		Meter Run: 3.068	Taps: FLG.

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	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI							6548		PKR		72 HRS.
1.	3	x	1.750	440	7.00	68	5745		"		1 HR.
2.	3	x	1.750	460	23.00	66	4960		"		1 HR.
3.	3	x	1.750	480	43.00	59	3877		"		1 HR.
4.	3	x	1.750	500	62.00	58	2845		"		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.	15.61	56.32	453.2	.9924	1.307	1.035	1,180
2.	15.61	104.32	473.2	.9943	1.307	1.037	2,195
3.	15.61	145.63	493.2	1.001	1.307	1.040	3,093
4.	15.61	178.38	513.2	1.002	1.307	1.041	3,796
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.67	528	1.52	.933
2.	.70	526	1.51	.930
3.	.73	519	1.49	.925
4.	.76	518	1.49	.923
5.				

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: DRY Deg.
Specific Gravity Separator Gas: .585 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: ** 671 P.S.I.A. ____ P.S.I.A.
Critical Temperature: ** 347 R ____ R

P_c = 6561.2 P_c^2 = 43049.3

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		5760.2	33179.9	9869.4
2.		4979.8	24798.4	18250.9
3.		3904.8	15247.5	27801.8
4.		2884.7	8321.5	34727.8
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.240 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.208

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 4.586

Absolute Open Flow: 4,586 Mcfd @ 15.025 | Angle of Slope θ: 48.7 | Slope, n: .878

Remarks: Equiv. length on 4½" - 1807' & 2 7/8" - 10225 Total 12032'

** = Corrected to 1.24% N_2 - Fluid TSTM

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

Betty Gildon
Enron Oil & Gas Company