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: CONOCO, INC.				Lease or Unit Name: LOCKHART A-18	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-30-93	Well No. 7
Completion Date: 11-9-93	Total Depth: 3800'		Plug Back TD: 3753'	Elevation	Unit Ltr. - Sec. - TWP. - Rge.: 18 21S 36E
Csg. Size: 5½	Wt.: 15.5	d: 4.950	Set At: 3800'	Perforations: From: 3146 To: 3677	County: LEA
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 3672	Perforations: From: To:	Pool: Eumont
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single			Packer Set At: 3102		Formation: ~~EUMONT~~ YATES SR-QN
Producing Thru: tbg.	Reservoir Temp. °F: 89	Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2		Connection: PIPELINE

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
5411.5	3411.5	.715	3.63	1.64		-0-	3.068	flg.

FLOW DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					170				
1.	3.068 X 2.125	19.0	1.6	46	162		PKR.		1 hr.
2.	3.068 X 2.125	20.4	4.0	49	154		"		1 hr.
3.	3.068 X 2.125	24.2	7.2	55	148		"		1 hr.
4.	3.068 X 2.125	27.1	14.0	57	135		"		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.	24.76	7.17	32.2	1.014	1.183	1.003	214
2.	24.76	11.58	33.6	1.011	1.183	1.003	344
3.	24.76	16.41	37.4	1.005	1.183	1.004	485
4.	24.76	23.75	40.3	1.003	1.183	1.004	701
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.05	506	1.31	.995
2.	.05	509	1.32	.994
3.	.055	515	1.33	.993
4.	.06	517	1.34	.992
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .715 XXXXXXXXX
Specific Gravity Flowing Fluid: Dry XXXXX
Critical Pressure: 679 P.S.I.A. P.S.I.A.
Critical Temperature: 387 R R

P_c 183.2 P_c^2 33.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		176.9	31.3	2.3
2.		171.7	29.5	4.1
3.		170.4	29.0	4.5
4.		168.4	28.3	5.2
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.432$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6.432$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4,509$

Absolute Open Flow 4,509 Mcfd @ 15.025 | Angle of Slope θ 45° | Slope, n 1.000

Remarks: NO FLUID MADE DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS GB	KS	BM