NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 10-9-80	
Company: CONOCO, INC.	Connection: EL PASO NATURAL GAS			810'FSL & 1980'FWL
Pool: EUMONT	Formation: QUEEN			Unit: N
Completion Date: 6-26-80	Total Depth: 3825'	Plug Back TD: 3763'	Elevation: 3540'GL	Farm or Lease Name: SEMU EUMONT
Csg. Size: 5 1/2" / Wt.: 15.5# / d: 4.950 / Set At: 3825'		Perforations: From 3564' To 3694'		Well No.: 109
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: 1.995 / Set At: 3547'		Perforations: From OPEN To ENDED		Unit: N / Sec.: 14 / Twp.: 20S / Rge.: 37E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: NONE		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 97° @ 3825'	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
3547'	3547'	.715	2.85	1.46	.04	—	4"	FLANGE

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					192		187		48 HRS
1.	4" X 1.000"	70	3.24	76	190		186	(STABILIZED)	30 MIN.
2.	4" X 1.000"	72	9.61	76	188		185	"	30 MIN.
3.	4" X 1.000"	74	22.09	74	183		182	"	30 MIN.
4.	4" X 1.000"	77	44.89	71	174		177	"	30 MIN.
5.	4" X 1.000"	81	51.64	72	137		170		60 MIN.

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	4.752	16.419	82.2	.9850	1.183	NIL	91
2.	4.752	28.614	85.2	.9850	1.183	NIL	158
3.	4.752	43.889	87.2	.9868	1.183	NIL	244
4.	4.752	63.632	90.2	.9896	1.183	NIL	354
5.	4.752	69.681	94.2	.9887	1.183	NIL	388

NO.	P_t	Temp. °R	T_r	Z
1.	.12	536	1.39	NIL
2.	.12	536	1.39	NIL
3.	.12	534	1.38	NIL
4.	.13	531	1.38	NIL
5.	.14	532	1.38	NIL

Gas Liquid Hydrocarbon Ratio: NONE Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .715 XXXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 677 P.S.I.A. P.S.I.A.
Critical Temperature: 386 R R

P_c 200.2 P_c^2 40.08

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	41.29	199.2	39.68	0.40
2	40.48	198.2	39.28	0.80
3	38.49	195.2	38.10	1.98
4	35.04	190.2	36.18	3.90
5	22.56	163.2	33.56	6.52

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 10.277$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.312$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1172.4$

Absolute Open Flow: 1,172 Mcfd @ 15.025 | Angle of Slope θ: 62.6 | Slope, n: .514

Remarks: NO FLUID PRODUCED DURING TEST.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
Orig. Signed by Jerry Sexton Dist. I Supv.	TOM C. ADDDELL	TOM C. Addell	