

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-2-81	
Company CONOCO, INC.				Connection EL PASO NATURAL GAS	
Pool EUMONT				Formation QUEEN	
Completion Date 8-23-80		Total Depth 3850'		Plug Back TD 3810'	
				Elevation 3543' 6" L	
Farm or Lease Name LOCKHART B					
Csg. Size 5 1/2"	Wt. 15.5 #	d 4.950	Set At 3849'	Perforations: From 3486' To 3708'	
Thg. Size 2 3/8"	Wt. 4.7 #	d 1.995	Set At 3751'	Perforations: From OPEN To ENDED	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru CASING		Reservoir Temp. °F 110 @ 3597'		Mean Annual Temp. °F 60	
				Baro. Press. - P _a 13.2	
State NEW MEXICO					
L 3597'	H 3597'	G _q .712	% CO ₂ 5.71	% N ₂ .68	% H ₂ S .03
Prover —		Meter Run 4"		Coups FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
SI							63		188		24 HRS.
1.	4" X 1.250"			63	2.89	76	66		182	(STABILIZED)	45 MIN.
2.	4" X 1.250"			63	7.29	76	68		176	"	60 MIN.
3.	4" X 1.250"			64	19.36	78	68		167	"	45 MIN.
4.	4" X 1.250"			65	34.81	80	70		157	"	45 MIN.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	14.840	76.2	.9850	1.185	NIL	129
2	7.469	23.569	76.2	.9850	1.185	NIL	205
3	7.469	38.660	77.2	.9831	1.185	NIL	336
4	7.469	52.174	78.2	.9813	1.185	NIL	453
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.11	536	1.39	NIL	DRY GAS	
2.	0.11	536	1.39	NIL		
3.	0.11	538	1.40	NIL		
4.	0.11	540	1.40	NIL		
5.						

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.				
Specific Gravity Separator Gas _____				
Specific Gravity Flowing Fluid _____				
Critical Pressure _____ P.S.I.A.				
Critical Temperature _____ R				

$P_c = 201.2$ $P_c^2 = 40.48$				
NO.	P_r^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	6.27	195.2	38.10	2.38
2	6.59	189.2	35.80	4.68
3	6.59	180.2	32.47	8.01
4	6.92	170.2	28.97	11.51
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.517$

AGF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.254$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.769$

Absolute Open Flow	1,254	Mcf/d @ 15.025	Angle of Slope θ	51.0°	Slope, n	.810
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Remarks: TUBING WAS LOGGED OFF, HAD TO RUN TEST THROUGH CASING.
NO FLUID PRODUCED DURING TEST.

Approved By Commission Jerry Sexton	Conducted By: Tom C. Aduddell	Calculated By: Tom C. Aduddell	Checked By:
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RECEIVED

APR 16 1981

OIL CONSERVATION DIV.