

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

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 C-122 file
 Form O-22
 Revised 6-1-66

AMENDED to correct perforation & tubing record

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 11/7/78		RECEIVED					
Company Dorchester Exploration, Inc.				Connection AIR		FEB 20 1979					
Pool SOUTH CARLSBAD				Formation MORROW		Unit NO. C. C.					
Completion Date 10/10/78		Total Depth 12007		Plug Back TD 11960		Elevation 3279 GL					
Csg. Size 5 1/2		Wt. n/20		Set At 12007		Perforations: From 11456 To 11940					
Tbg. Size 2 3/8		Wt. n/80		Set At 11417		Perforations: From To					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11417		County EDDY					
Producing Thru TBG.		Reservoir Temp. °F 180 @ PERFS.		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2					
L 11413		H 11418		G _g .574		% CO ₂ 1.19					
				% N ₂ .84		% H ₂ S					
				Prover		Meter Run 4"					
						Taps FLG.					
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	Duration of Flow
SI							2488				72 HRS.
1.	4	X	1.250	510	2.5	95	2325				1 HR.
2.	4	X	1.250	510	5.5	86	2195				1 HR.
3.	4	X	1.250	510	11.0	87	1990				1 HR.
4.	4	X	1.250	510	21.0	82	1530				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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	7.469	36.17	523.2	.9680	1.320	1.031	356				
2	7.469	53.64	523.2	.9759	1.320	1.034	534				
3	7.469	75.86	523.2	.9750	1.320	1.034	754				
4	7.469	104.82	523.2	.9795	1.320	1.034	1047				
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio <u>DRY</u> Mct/bbl.						
1	.78	555	1.60	.940	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.						
2	.78	546	1.58	.936	Specific Gravity Separator Gas <u>.574</u>		X X X X X X X X X				
3	.78	547	1.58	.936	Specific Gravity Flowing Fluid <u>X X X X X</u>						
4	.78	542	1.57	.935	Critical Pressure <u>672</u> P.S.I.A.		_____ P.S.I.A.				
5					Critical Temperature <u>346</u> R		_____ R				
P _c <u>2501.2</u>		P _w <u>6256.0</u>									
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.630$						
1		2339.9	5475.1	780.9	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.374$						
2		2211.0	4888.5	1367.5							
3		2008.3	4033.3	2222.7							
4		1555.0	2418.0	3838.0	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.438$						
5											
Absolute Open Flow <u>1.438</u> Mcfd @ 15.025				Angle of Slope <u>57°</u>				Slope, n <u>.650</u>			
Remarks: _____											
Approved By Commission:				Conducted By: <u>John R. Davis</u>				Calculated By: <u>Larry Davis</u>			
								Checked By: <u>Tommy L. ...</u>			