

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

Form C-122
Revised 9-1-65

RECEIVED

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C-122*

Type Test ☐ Initial ☒ Annual ☐ Special				Test Date 7-3-73		SEP 11 1973	
Company CORINNE GRACE				Connection EL PASO NATURAL GAS COMPANY			
Pool SOUTH CARLSBAD				Formation STRAWN			
Completion Date 5-4-73		Total Depth 11,875'		Plug Back TD 11,761'		Elevation 3207.8 GL	
Farm or Lease Name GRACE CARLSBAD				Well No. 1			
Csg. Size 4 1/2"	Wt. 11.50	d 10.50	Set At 16,375'	Perforations: From 10,270' To 10,492'		Unit 1	
Tbg. Size 2- 3/8"	Wt. 4.7	d 10,169'	Set At 10,169'	Perforations: From 10,270' To 10,492'		Unit 1	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GAS GAS DUAL				Packer Set At 10,169'		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 183° @ 10,150'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NEW MEXICO		L 10,169		H 10,169		G _g EST. 0.652	
		% CO ₂ EST. 0.44		% N ₂ EST. 0.74		% H ₂ S -0-	
Prover		Meter Run 4"		Taps 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
1.	4 x 1.25"				22.1	90	1115.0		PKR.	CHOKE	
2.	4 x 1.25"				41.0	89	1017.0	82		12/64"	80 MIN.
3.	4 x 1.25"				75.7	87	941.0	80		15/64"	60 MIN.
4.	4 x 1.25"				72.3	85	846.0	80		18/64"	60 MIN.
5.							769.0	80		19/64"	60 MIN.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.469	86.22	336.4	0.9723	1.238	1.029	798
2.	7.469	121.49	360.0	0.9732	1.238	1.032	1097
3.	7.469	156.82	324.9	0.9750	1.238	1.029	1455
4.	7.469	158.65	348.1	0.9768	1.238	1.031	1477
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio T.S.T.M. Mcf/bbl.	
1.	0.50	550	1.47	0.945	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	
2.	0.54	549	1.46	0.939	Specific Gravity Separator Gas 0.652 XXXXXXXXXX	
3.	0.48	547	1.46	0.945	Specific Gravity Flowing Fluid XXXXX	
4.	0.52	545	1.45	0.940	Critical Pressure 670 P.S.I.A. _____ P.S.I.A.	
5.					Critical Temperature 375 R _____ R	

P _c 1482.2 P _c ² 2196.9			
NO.	P _t ²	P _w	P _w ²
1		1387.2	1924.3
2		1278.2	1633.8
3		1206.2	1454.9
4		1116.2	1245.9
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.0591$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.8388$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2265$

Absolute Open Flow	2,265	Mcf/d @ 15.025	Angle of Slope @	63.3	Slope, n	0.500
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Remarks: BOTTOM HOLE PRESSURES MEASURED WITH AMERADA GAUGE @ 10,150 FEET

L-10 CHART READINGS CONVERTED TO CONVENTIONAL BASED ON 100"-1000# METER

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	D. TYSON	R. WEST	