

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

Form C-122
Revised 9-1-65

Copy 1 of 5
C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-8-72		MAR 22 1973	
Company CORINNE GRACE		Connection NONE		Unit O. C. C.	
Pool SOUTH CARLSBAD		Formation STRAWN		ARRESTED SURFACE	
Completion Date 5-4-72		Total Depth 11875		Plug Back TD 11761	
Elevation 3207.8 GL		Farm or Lease Name GRACE - CARLSBAD		Well No. 1	
Csg. Size 4-7/8"	Wt. 11.50	Set At 10735	Perforations: From 10270 To 10492		Well No. 1
Tbg. Size 2-3/8"	Wt. 4.7	Set At 10169	Perforations: From 10270 To 10492		Unit Sec. Twp. Rge. I 36 22S 26E
Type Well - Single - Bradenhead - G.C. or G.O. Multiple GAS GAS DUAL			Packer Set At 10169		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 175 @ 10150		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico		Prover Meter Run 4" Flange	
L 10169	H 10169	G _g 0.652 EST.	% CO ₂ EST. 0.44	% N ₂ EST. 0.74	% H ₂ S -0-

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							3118.0		CHOKE	
1.	1"	X	2.25"	525.0	7.0	76	2936.0	78	14/64"	1.0
2.	1"	X	2.25"	535.0	28.0	80	2564.0	77	22/64"	1.0
3.	1"	X	2.25"	545.0	45.0	78	2215.0	78	28/64"	1.0
4.	1"	X	2.25"	525.0	69.0	86	1652.0	78	38/64"	1.0
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, Fpv	Rate of Flow Q, Mcfd
1	25.64	61.38	538.2	.9850	1.238	1.051	2017
2	25.64	123.90	548.2	.9813	1.238	1.051	4056
3	25.64	158.49	558.2	.9831	1.238	1.053	5208
4	25.64	192.72	538.2	.9759	1.238	1.047	6251
5.							

NO.	P _t	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.80	536	1.43	.906	43.4 Mcf/bbl.		XXXXXXX	XXXXX	670 P.S.I.A.	375 R
2.	.82	540	1.44	.906						
3.	.83	533	1.43	.902						
4.	.80	546	1.46	.912						
5.										

P _c 1233.2 P _c ² 17920		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.6368$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8982$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	
1	4038.2	16307	1613		
2	3663.2	13419	4501		
3	3335.2	11124	6796		
4	2760.2	7619	10301		
5					

AOE = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9886$

Absolute Open Flow	9886 Mcfd @ 15.025	Angle of Slope	56.5	Slope, n	0.661
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Remarks: BHP's measured with Amerada bomb at 10150'.
Third rate of flow used to calculate AOE

Approved By Commission:	Conducted By: D. Tyson	Calculated By: R. West	Checked By:
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