

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial 4-point ☐ Annual ☐ Special						Test Date 2-17-81	
Company InterNorth, Inc. ✓				Connection Llano, Inc.			
Pool Undesignated <i>South Carlsbad Morrow</i>				Formation Morrow		Unit	
Completion Date 8-4-80		Total Depth 11827		Plug Back TD 11768		Elevation 3105.8 G.L.	
Farm or Lease Name Carlsbad State Com							
Csg. Size 5		Wt. 23.0		Set At 4.778		Perforations: From 11620 To 11747	
Well No. 1							
Tbg. Size 2-3/8		Wt. 4.7		Set At 1.995		Perforations: From To	
Unit E		Sec. 16		Twp. 22		Rge. 27	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 11520		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 196 @ 11683		Mean Annual Temp. °F 60 ⁰		Baro. Press. - P _a 13.2	
State New Mexico							
L 11683		H 11683		G _g .592		% CO ₂ 1.00	
						% N ₂ 0	
						% H ₂ S -	
Prover		Meter Run 3"		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
SI											
1.	3 x 1.00			550	3.5	74	2392	60	PKR.		25 hr.
2.	3 x 1.00			550	7.0	72	2115	64			1 hr.
3.	3 x 1.00			550	13.0	71	1727	68			1 hr.
4.	3 x 1.00			554	22.0	71	1305	73			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	4.789	44.40	563.2	0.9868	1.300	1.043	284
2	4.789	62.79	563.2	0.9887	1.300	1.044	403
3	4.789	85.57	563.2	0.9896	1.300	1.044	550
4	4.789	111.71	567.2	0.9896	1.300	1.044	719
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.83	534	1.51	.920	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.83	532	1.50	.918	Specific Gravity Separator Gas _____ X X X X X X X X
3.	.83	531	1.50	.918	Specific Gravity Flowing Fluid _____ X X X X X Dry
4.	.83	531	1.50	.918	Critical Pressure _____ 676 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ 353 R _____ R

P _c 3566.2 P _c ² 12717.8	
NO.	P _t ²
1	3181.2
2	2927.2
3	2521.2
4	2082.2
5	

$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.517$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.406$	
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1010$			

Absolute Open Flow 1010 Mcfd @ 15.025		Angle of Slope θ 50.7		Slope, n .817	
Remarks: Bottom hole with RPG.-3 Ser No. 20757N					

Approved By Commission:	Conducted By: M.H., J.H., C.C.	Calculated By: M. HANSEN	Checked By:
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