

Martin Water Laboratories

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RESULT OF WATER ANALYSES

TO: Mr. Robert D. Fitting & Assoc. LABORATORY NO. 371204
901 W. Missouri, Midland, Texas SAMPLE RECEIVED 3-29-71
RESULTS REPORTED 4-5-71

COMPANY Carter Foundation Production Co. LEASE
FIELD OR POOL Langle-Mattix
SECTION BLOCK SURVEY COUNTY Lea STATE N. M.

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from co-mingled water tank. 3-26-71

NO. 2

NO. 3

NO. 4

REMARKS:

No - reinjected in Blaine-Cade W.F.
Penrose [Devonian, & McKee]

CHEMICAL AND PHYSICAL PROPERTIES

	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0802			
pH When Sampled				
pH When Received	7.5			
Bicarbonate as HCO ₃	493			
Supersaturation as CaCO ₃	100			
Undersaturation as CaCO ₃	-			
Total Hardness as CaCO ₃	31,000			
Calcium as Ca	4,160			
Magnesium as Mg	5,006			
Sodium and/or Potassium	32,958			
Sulfate as SO ₄	3,951			
Chloride as Cl	69,599			
Iron as Fe	39.8			
Barium as Ba	0			
Turbidity, Electric	179			
Color as Pt	8			
Total Solids, Calculated	116,167			
Temperature °F.				
Carbon Dioxide, Calculated	26			
Dissolved Oxygen, Winkler	0.0			
Hydrogen Sulfide	45.0			
Resistivity, ohms/m at 77° F.	0.132			
Suspended Oil				
Filtrable Solids as mg/l	855			
Volume Filtered, ml	250			

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks These results reveal no characteristic that would be incompatible with the Penrose. However, we find rather severely detrimental conditions existing in this water alone. This involves distinct calcium carbonate and calcium sulfate scaling tendencies. It also had a severe iron sulfide precipitate. Also, in conjunction with this there were some heavy hydrocarbons to make all these conditions together result in a severe filtrable solids. We would therefore classify this as a severely plugging water. We would suggest samples be submitted from each of the zones represented so that we can make individual analyses and study compatibilities of these waters.