

RECEIVED MAY 14 1984

P. O. BOX 1468  
MONAHAN, TEXAS 79756  
PH 943-3234 OR 963-1040

Martin Water Laboratories, Inc.

709 W. INDIANA  
MIDLAND, TEXAS 79701  
PHONE 683-4521

## RESULT OF WATER ANALYSES

TO: Mr. John Walker  
P.O. Box 2203, Roswell, NM 88201

LABORATORY NO. 58460  
SAMPLE RECEIVED 5-2-84  
RESULTS REPORTED 5-9-84

COMPANY Stevens Operating Corporation LEASE

FIELD OR POOL

SECTION BLOCK SURVEY COUNTY STATE

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Santa Rosa water - taken from well #5.

NO. 2 Santa Rosa water - taken from well #5 (flow test @ 15 gpm).

NO. 3 Santa Rosa water - bailed from well #7.

NO. 4 1 &amp; 2 500' - 630' (water sand)

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0255	1.0253	1.0246	
pH When Sampled				
pH When Received	7.03	7.38	7.26	
Bicarbonate as HCO <sub>3</sub>	137	129	144	
Supersaturation as CaCO <sub>3</sub>				
Undersaturation as CaCO <sub>3</sub>				
Total Hardness as CaCO <sub>3</sub>	3,550	3,600	3,250	
Calcium as Ca	980	920	830	
Magnesium as Mg	267	316	286	
Sodium and/or Potassium	10,043	9,951	9,487	
Sulfate as SO <sub>4</sub>	6,003	6,057	5,895	
Chloride as Cl	13,494	13,352	12,499	
Iron as Fe	46.8	1.4	15.6	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	30,923	30,725	29,141	
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohms/m at 77° F.	0.245	0.245	0.260	
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The objective of these analyses is to establish compatibility between Santa Rosa water herein and San Andres water represented on analysis #58456. In comparing these waters, we see no evidence of incompatibility in injecting Santa Rosa into the San Andres or mixing with San Andres prior to injection except for the following implications. We note rather high iron contents herein which would precipitate as iron sulfide when mixed with the San Andres, but we are confident this is the result of water well corrosion. We feel this could be controlled adequately to provide good compatibility with the San Andres. It would be of no concern in injecting into the San Andres, but corrosion would have to be controlled to mix on the surface. We feel this water could be maintained air-free and therefore could be used for injection or mixing with the San Andres.

By

*[Signature]*  
J. L. Martin, M.A.

