

MARTIN WATER LABORATORIES, INC.

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P.O. Box 1468 Phone 943-3234 or 563-1040
Monahans, Texas 79756

RESULT OF WATER ANALYSES

709 W. Indiana Phone 683-4521
Midland, Texas 79701

TO: Mr. Jim Blount

LABORATORY NO. 692162

SAMPLE RECEIVED 6-16-92

400 W. Illinois, Suite 1000, Midland, TX

RESULTS REPORTED 9-22-92

API WATER ANALYSIS REPORT FORM

Company Mitchell Energy		Sample No.		Date Sampled	
Field <u>Tonto, S.</u> <u>North Pearl</u>		Legal Description		County or Parish Lea State NM	
Lease or Unit Geronimo Federal		Well #7	Depth	Formation Yates Seven Rivers	Water, B/D
Type of Water (Produced, Supply, etc.) Produced			Sampling Point		Sampled By

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	6,527	283.8
Calcium, Ca	1,350	67.5
Magnesium, Mg	443	36.5
Barium, Ba		

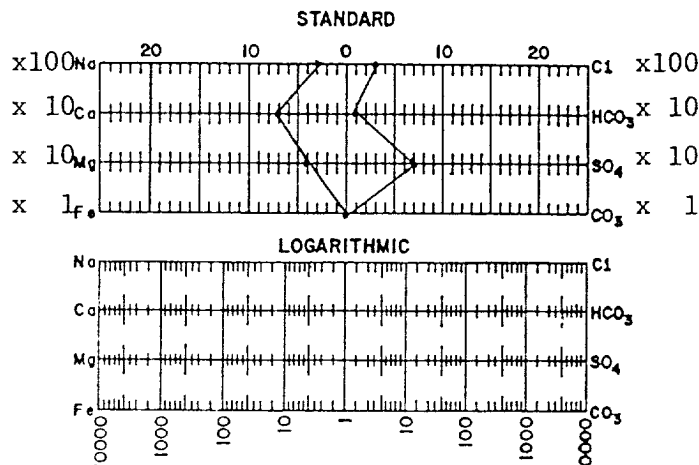
OTHER PROPERTIES

pH	7.57
Specific Gravity, 60/60 F.	1.0199
Resistivity (ohm-meters) <u>77° F.</u>	0.350
Total Hardness, as CaCO ₃	5,200

ANIONS

Chloride, Cl	11,008	310.4
Sulfate, SO ₄	3,151	65.5
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	720	11.8

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)

23,199

Iron, Fe (total)

0.20

0.0

Sulfide, as H₂S

32.0

REMARKS & RECOMMENDATIONS: We have no records of either Yates or Seven Rivers waters sufficiently near this field for use in comparing with the above. Our more distant records show wide variations in the characteristics of both Yates and Seven Rivers; therefore, we would not feel confident in using them to draw a conclusion regarding the origin of this water. However, we would basically consider the characteristics to be that of a natural subsurface water. We do note that the water from this well is similar to the water from well #10 except for a substantial difference in the sulfate level.

Waylan C. Martin, M.A.