CORE LABORATORIES, INC.
DALLAS CHEMICAL LABORATORY
DALLAS, TEXAS 75229
214/350-7893

WATER ANALYSIS

File DCL 846097

Company Energy Reserves Group, Inc. Well Name _____ Sample No. _____

Formation Mississippi Chert Depth _____ Sampled From Tjaden "A" Lease

Location _____ Field _____ County Kingman State Kansas

Date Sampled May 15, 1984 Date Analyzed May 25, 1984 Analyst J.A. Lutkenhaus

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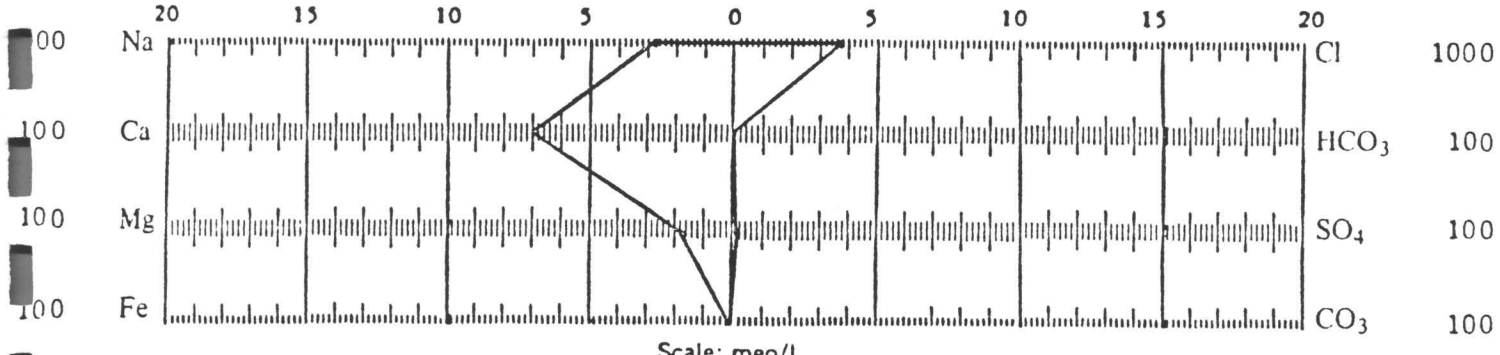
Total Dissolved Solids 209567 mg/L calculated Sp. Gr. 1.1407 @ 76.3 °F

Resistivity 0.05564 ohm-meters @ 76.3 °F measured 1.1418 @ 20 °C (68°F)

Total Sulfide _____

pH 4.86 @ 75 °F Hydrogen Sulfide Absent

Constituents	meq/L	mg/L	Constituents	meq/L	mg/L
Sodium	2778.28	63873	Chloride	3643.80	129167
Calcium	700.10	14030	Bicarbonate	0.32	19.3
Magnesium	169.87	2065	*Sulfate	6.95	334
Iron	2.82	78.8	Carbonate	0.0	0.0
*Barium	0.0	0.0	Hydroxide	0.0	0.0



Scale: meq/L

Total Iron 78.8 mg/l Fe
Dissolved Iron 31.3 mg/l Fe
Suspended Iron 47.5 mg/l Fe

Strontium by analysis 490 mg/l Sr

* Gravimetric Analysis

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