

UNICHEM INTERNATIONAL  
P.O. BOX 1499 707 NORTH LEECH STREET  
HOBBS, NEW MEXICO 88240

Olson Energy  
16414 San Padre  
San Antonio , TX 78232

Report Date: June 3, 1993  
Lab In Date: June 2, 1993  
Sample Date: May 28, 1993

Dear Rusty Olson

Listed below please find our water analysis report from B. V. Lynch , SWD :

Specific Gravity: 1.017  
Total Dissolved Solids: 24171  
PH: 7.18  
Ionic Strength: .482

CATIONS:

|              |        | mg/liter |
|--------------|--------|----------|
| Calcium:     | (Ca++) | 1120     |
| Magnesium:   | (Mg++) | 437      |
| Sodium:      | (Na+)  | 7226     |
| Iron (Total) | (Fe++) | 133.00   |
| Barium       | (Ba++) | .80      |
| Manganese:   | (Mn++) | .62      |
| Resistivity: |        |          |

ANIONS:

|              |         |       |
|--------------|---------|-------|
| Bicarbonate: | (HCO3-) | 608   |
| Carbonate:   | (CO3--) | 0     |
| Hydroxide:   | (OH-)   | 0     |
| Sulfate:     | (SO4--) | 2780  |
| Chloride:    | (Cl-)   | 12000 |

GASES:

|                   |       |       |
|-------------------|-------|-------|
| Carbon Dioxide:   | (CO2) | ***** |
| Oxygen:           | (O2)  | ***** |
| Hydrogen Sulfide: | (H2S) | ***** |

SCALE INDEX (Positive Value Indicates Scale Tendency) \* indicates tests were not run.

| Temperature | CaCO3 SI | CaSO4 SI |
|-------------|----------|----------|
| 86F 30.0C   | .56      | -7.16    |
| 104F 40.0C  | .80      | -7.47    |
| 122F 50.0C  | 1.05     | -7.65    |
| 140F 60.0C  | 1.33     | -7.09    |
| 168F 70.0C  | 1.66     | -5.90    |
| 176F 80.0C  | 2.00     | -3.96    |

If you have any questions or require further information, please contact us.

Sincerely,

*Jeanne M. McMurray*

Laboratory Technician

cc:

bc: Joe Hay  
John Offutt