

# SCALE TENDENCY REPORT

|            |                      |              |             |
|------------|----------------------|--------------|-------------|
| Company    | : YATES PETROLEUM    | Date         | : 4/6/94    |
| Address    | : ARTESIA, NM        | Date Sampled | : 4/6/94    |
| Lease      | : LILY "ALY" FEDERAL | Analysis No. | : 673       |
| Well       | : #1                 | Analyst      | : S. TIGERT |
| Sample Pt. | : WELLHEAD           |              |             |

## STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO3 Scaling Tendency

|        |      |    |          |      |         |   |
|--------|------|----|----------|------|---------|---|
| S.I. = | -0.9 | at | 60 deg.  | F or | 16 deg. | C |
| S.I. = | -0.9 | at | 80 deg.  | F or | 27 deg. | C |
| S.I. = | -0.9 | at | 100 deg. | F or | 38 deg. | C |
| S.I. = | -0.9 | at | 120 deg. | F or | 49 deg. | C |
| S.I. = | -0.9 | at | 140 deg. | F or | 60 deg. | C |

\*\*\*\*\*

## CALCIUM SULFATE SCALING TENDENCY CALCULATIONS (Skillman-McDonald-Stiff Method) Calcium Sulfate

|     |      |    |          |      |        |   |
|-----|------|----|----------|------|--------|---|
| S = | 830  | at | 60 deg.  | F or | 16 deg | C |
| S = | 923  | at | 80 deg.  | F or | 27 deg | C |
| S = | 981  | at | 100 deg. | F or | 38 deg | C |
| S = | 1006 | at | 120 deg. | F or | 49 deg | C |
| S = | 1023 | at | 140 deg. | F or | 60 deg | C |

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
S. TIGERT