# WATER ANALYSIS REPORT

NL Treating Chemicals/NL Industries, Inc.
P. O. Box 4305 Houston, Texas 77210

SHEET NUMBER

COMPANY: Texaco Producing Inc

DATE: 6-18-85

FIELD: Eunice Area

COUNTY OR PARISH: Lea

STATE: NM

LEASE OR UNIT: Skelly Penrose "A" Unit

WELL(S) NAME OR NO.: Windmill North of Junkyard

WATER SOURCE (FORMATION):

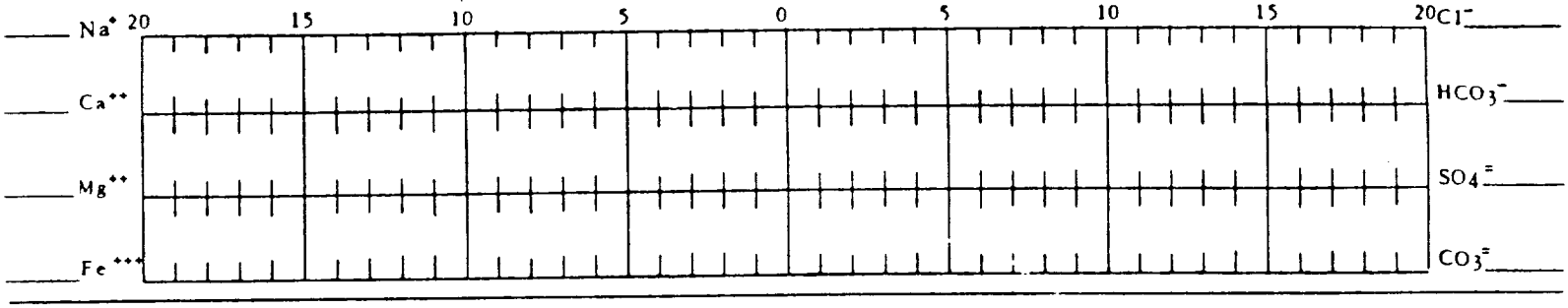
| DEPTH, FT. | BHT, F | SAMPLE SOURCE | TEMP, F | WATER, BBL/DAY | OIL, BBL/DAY | GAS, MMCF/DAY |
|---|---|---|---|---|---|---|
| | | Tank | | | | |

DATE SAMPLED: 6-18-85

TYPE OF WATER: ☐ PRODUCED ☐ SUPPLY ☐ WATERFLOOD ☐ SALT WATER DISPOSAL

## WATER ANALYSIS PATTERN

(NUMBER BESIDE ION SYMBOL INDICATES me/l* SCALE UNIT)




## DISSOLVED SOLIDS

| CATIONS | me/l* | mg/l* |
|---|---|---|
| Total Hardness | 3.8 | |
| Calcium, $Ca^{++}$ | 0 | 0 |
| Magnesium, $Mg^{++}$ | 3.8 | 46.4 |
| Iron (Total) $Fe^{+++}$ | | 0.5 |
| Barium, $Ba^{++}$ | | |
| Sodium, $Na^{+}$(calc.) | 21.6 | 496.8 |
| | | |
| **ANIONS** | | |
| Chloride, $Cl^{-}$ | 14.1 | 500 |
| Sulfate, $SO_4^{=}$ | 5.7 | 275 |
| Carbonate, $CO_3^{=}$ | 0.8 | 24.0 |
| Bicarbonate, $HCO_3^{-}$ | 4.8 | 292.8 |
| Hydroxyl, $OH^{-}$ | | |
| Sulfide, $S^{=}$ | <1 | |

## DISSOLVED GASES

| | |
|---|---|
| Hydrogen Sulfide, $H_2S$ | _____ mg/l* |
| Carbon Dioxide, $CO_2$ | _____ mg/l* |
| Oxygen, $O_2$ | _____ mg/l* |

## PHYSICAL PROPERTIES

| | |
|---|---|
| pH | 8.0 |
| Eh (Redox Potential) | _____ MV |
| Specific Gravity | _____ |
| Turbidity, JTU Units | _____ |
| Total Dissolved Solids (calc.) | 1611.5 mg/l* |
| Stability Index @____F | _____ |
| @____F | _____ |
| $CaSO_4$ Solubility @____F | _____ mg/l* |
| @____F | _____ mg/l* |
| Max. $CaSO_4$ Possible (calc.) | _____ mg/l* |
| Max. $BaSO_4$ Possible (calc.) | _____ mg/l* |
| Residual Hydrocarbons | _____ ppm(Vol/Vol) |

## SUSPENDED SOLIDS (QUALITATIVE)

Iron Sulfide ☐ Iron Oxide ☐ Calcium Carbonate ☐ Acid Insoluble ☐

*NOTE: me/l and mg/l are commonly used interchangeably for epm and ppm respectively. Where epm and ppm are used, corrections should be made for specific gravity.

***REMARKS AND RECOMMENDATIONS:***

Complete Analysis

| BTC ENGINEER | DIST. NO. | ADDRESS | OFFICE PHONE | HOME PHONE |
|---|---|---|---|---|
| Warner | 821 | | | |
| ANALYZED | DATE | DISTRIBUTION | | |
| Rec'd | 6/19/85 | ☐ CUSTOMER ☐ AREA OR ☐ DISTRICT OFFICE ☐ BTC ENGINEER OR ☐ BTC LAB ☐ BTC SALES SUPERVISOR | | |