



Compatibility - Hat mesa  
Hat mesa A  
Hat mesa 2  
w/ James Billbrey 34-1  
Wax  
PHONE: (505) 393-7726

GP.O.BOX 2187  
HOBBS, N.M. 88240

## WATER ANALYSIS REPORT

Report for: Randall Smith  
cc: Scott Malone  
cc: Pat Culpepper  
cc:  
Company: Phillips  
Address:  
Service Engineer: K. Kearney

Date sampled: 12-14-93  
Date reported: 12-20-93  
Lease or well #: 10% Four Well Mix  
County: State:  
Formation: 90% Lost Tank H2O  
Depth:  
Submitted by: K. Kearney

| CHEMICAL COMPOSITION : | mg/L   | meq/L |
|------------------------|--------|-------|
| Chloride (Cl)          | 158333 | 4466  |
| Iron (Fe) (total)      | 5.0    |       |
| Total hardness         | 93024  |       |
| Calcium (Ca)           | 28897  | 1442  |
| Magnesium (Mg)         | 5050   | 405   |
| Bicarbonates (HCO3)    | 56     | 1     |
| Carbonates (CO3)       | 0      |       |
| Sulfates (SO4)         | 135    | 3     |
| Hydrogen sulfide (H2S) | 0      |       |
| Carbon dioxide (CO2)   | 1046   |       |
| Sodium (Na)            | 60322  | 2623  |
| Total dissolved solids | 252793 |       |
| Barium (Ba)            | 3.4    |       |
| Strontium (Sr)         | 775    |       |
| Specific Gravity       | 1.180  |       |
| Density (#/gal.)       | 9.834  |       |
| pH                     | 6.256  |       |
| IONIC STRENGTH         | 5.40   |       |

Stiff-Davis (CaCO3) Stability Index :  
SI = pH - pCa - pAlk - K

SI @ 86 F = +1.19  
104 F = +1.42  
122 F = +1.68  
140 F = +1.97  
158 F = +2.29

This water is 540 mg/l (-73.87%) under ITS CALCULATED  
CaSO4 saturation value at 82 F.  
SATURATION= 731 mg/L PRESENT= 191 mg/L

REPORTED BY ROBERT C MIDDLETON *Rem*  
TECHNICAL SERVICES REPRESENTATIVE