

27-31N-17E



2506 West Main Street  
Farmington, New Mexico 87401  
Tel. (505) 326-4737

CLIENT: NMOCD-Penzoil  
ID: 9009101600  
SITE: Well 3017-271 G  
LAB NO: F4991

DATE REPORTED: 10/09/90  
DATE RECEIVED: 09/14/90  
DATE COLLECTED: 09/10/90

|                                                   |      |
|---------------------------------------------------|------|
| Lab pH (s.u.).....                                | 8.36 |
| Lab conductivity, umhos/cm.....                   | 1170 |
| Lab resistivity, ohm-m.....                       | 8.55 |
| Total dissolved solids (180), mg/l..              | 924  |
| Total dissolved solids (calc), mg/l.              | 912  |
| Total alkalinity as CaCO <sub>3</sub> , mg/l..... | 641  |
| Total acidity as CaCO <sub>3</sub> , mg/l.....    | 0    |
| Total hardness as CaCO <sub>3</sub> , mg/l.....   | 50.2 |
| Sodium absorption ratio.....                      | 22.7 |

|                                       | mg/l | meq/l  |
|---------------------------------------|------|--------|
| Bicarbonate as HCO <sub>3</sub> ..... | 763  | 12.5   |
| Carbonate as CO <sub>3</sub> .....    | 10.2 | 0.34   |
| Chloride.....                         | 139  | 3.91   |
| Sulfate.....                          | 1.65 | 0.03   |
| Calcium.....                          | 12   | 0.6    |
| Magnesium.....                        | 4.9  | 0.4    |
| Potassium.....                        | 1.44 | 0.04   |
| Sodium.....                           | 369  | 16.1   |
| Major cations.....                    |      | 17.1   |
| Major anions.....                     |      | 16.8   |
| Cation/anion difference.....          |      | 0.96 % |

Trace metals by AA (dissolved concentration), mg/l

|                    | Analytical<br>Result: | Detection<br>Limit: |
|--------------------|-----------------------|---------------------|
| Arsenic (As).....  | ND                    | <0.005              |
| Cadmium (Cd).....  | ND                    | <0.002              |
| Lead (Pb).....     | ND                    | <0.005              |
| Selenium (Se)..... | ND                    | <0.005              |

SEC 27, T31N, R 17E

1750 FNL

2089 FEL

TOTAL DEPTH 1993'

PERFS 1481-1747 VERMEJO FORMATION COAL SEAMS