

PANTECHS LABORATORIES

90-3

P. O. BOX 2439 TEL. 806 669-6821 PAMPA, TEXAS 79066-2439
 P. O. BOX 3246 TEL. 806 797-4325 LUBBOCK, TEXAS 79452-3246

SEC. 32, 31N, 18E

WATER ANALYSIS

SAMPLING DATA

Lab #.....1293
 Customer.....VERMEJO MINERALS CORP
 Sample ID.....WELL # 90-3
 Produced Water
 Date sampled.....5-5-91
 Sampling point.....--
 Sample temp (deg. F).....75
 Sampled by.....Vermejo
 Analysis date.....5-10-91

REMARKS:

CLOUDY- VISIBLE SOLIDS
 NO ODOR

DISTRIBUTION

3-VERMEJO MINERALS CORPORATION
 ROUTE 1 BOX 68
 CIMARRON, NEW MEXICO 87114
 MR LARRY WILLIAMSON

ANALYTICAL DATA

pH.....8.46
 Specific gravity @ 75 deg. F.....1.0015
 Resistivity (ohm-cm).....2.81
 Filterable solids (mg/l).....132.8
 Carbon dioxide (CO2) mg/l.....NA
 Sulfide (as H2S) mg/l.....NA
 Total hardness (as CaCO3) mg/l.....NA

DISSOLVED SOLIDS

Cations	meq/l	mg/l	ppm
Sodium (Na)	38.1	876	875
Calcium (Ca)	.2	4	4
Magnesium (Mg)	.1	1	1
Iron (Fe), total	0	0	0
Potassium (K)	NA	NA	NA
Barium (Ba)	NA	NA	NA
Anions			
Chloride (Cl)	20.7	734	733
Sulfate (SO4)	0	0	0
Carbonate (CO3)	.4	12	12
Bicarbonate (HCO3)	17.4	1061	1059
Hydroxide (OH)	0	0	0
Total dissolved solids (calculated)	76.9	2688	2684

Analysis By Steven Hopkins

Water Patterns (meq/l)
 Logarithmic

