

TRETOLITE DIVISION

369 Marshall Avenue / Saint Louis, Missouri 6
(314) WO 1-3500/TWX 910-760-1660/Telex 44-2

WATER ANALYSIS REPORT

COMPANY Phillips Petroleum Co. ADDRESS Hobbs, N. M. DATE 8-26-77

SOURCE C.D.U. Woolsworth Holding Tank DATE SAMPLED 8-26-77 ANALYSIS NO. 14507

Analysis	Mg/L	*Meq/L
1. PH <u>7.1</u>		
2. H ₂ S (Qualitative) <u>460 ppm</u>		
3. Specific Gravity <u>1.005</u>		
4. Dissolved Solids <u>11,289</u>		
5. Suspended Solids		
6. Phenolphthalein Alkalinity (CaCO ₃)		
7. Methyl Orange Alkalinity (CaCO ₃) <u>1,010</u>		
8. Bicarbonate (HCO ₃) <u>1,232</u> ÷ 61 <u>20</u> HCO ₃		
9. Chlorides (Cl) <u>3,511</u> ÷ 35.5 <u>99</u> Cl		
10. Sulfates (SO ₄) <u>2,850</u> ÷ 48 <u>59</u> SO ₄		
11. Calcium (Ca) <u>540</u> ÷ 20 <u>27</u> Ca		
12. Magnesium (Mg) <u>333</u> ÷ 12.2 <u>27</u> Mg		
13. Total Hardness (CaCO ₃) <u>2,720</u>		
14. Total Iron (Fe) <u>14.0 ppm</u>		
15. Barium (Qualitative)		
16.		

*Milli equivalents per liter

PROBABLE MINERAL COMPOSITION

Compound	Equiv. Wt.	X	Meq/L	=	Mg/L
Ca (HCO ₃) ₂	81.04	<u>20</u>			<u>1,620</u>
Ca SO ₄	68.07	<u>7</u>			<u>477</u>
Ca Cl ₂	55.50				
Mg (HCO ₃) ₂	73.17				
Mg SO ₄	60.19	<u>27</u>			<u>1,625</u>
Mg Cl ₂	47.62				
Na HCO ₃	84.00				
Na ₂ SO ₄	71.03	<u>25</u>			<u>1,775</u>
Na Cl	58.46	<u>99</u>			<u>5,792</u>

Saturation Values Distilled Water 20°C

Ca CO ₃	13 Mg/L
Ca SO ₄ • 2H ₂ O	2,090 Mg/L
Mg CO ₃	103 Mg/L

REMARKS McGee - Summerwell - Davis
Brewer - Roberts - Gray - file

Respectfully submitted
TRETOLITE COMPANY

Ray Shaffner