

VISCO WATER ANALYSIS WORK SHEET

COMPANY Timka Resources LOCATION Washington County, Colorado
 TIME 5-12-18 LEASE Theurer Farms & Federal WATER SOURCE Water Fault

TOTAL DISSOLVED SOLIDS:

CATIONS	Column 1 mg/l as compound	Column 2 mg/l as ions	Column 3 mg/l
A. Sodium		<u>6955.8183</u> as Na+ = 23.0X	<u>302.42819</u> A.
B. Total hardness, as CaCO ₃ =	<u>700</u>		
C. Calcium, as CaCO ₃ =	<u>600</u> X 0.400 =	<u>240</u> as Ca++ X 0.080 =	<u>12</u> C.
D. Magnesium, as CaCO ₃ =	<u>100</u> X 0.243 =	<u>24.3</u> as Mg++ X 0.0823 =	<u>1.99989</u> D.
E. Barium, as BaSO ₄ =	<u>0</u> X 0.589 =	<u>0</u> as Ba++ X 0.0146 =	<u>0</u> E.
F. Total Cations =		<u>7220.1483</u> Subtotal	<u>13.99989</u> F.
ANIONS			
G. Chloride, as NaCl =	<u>17200</u> X 0.607 =	<u>10440.4</u> as Cl- X 0.0282 =	<u>294.41928</u> G.
H. Sulfate, as Na ₂ SO ₄ =	<u>0</u> X 0.676 =	<u>0</u> as SO ₄ X 0.0206 =	<u>0</u> H.
I. Carbonate, as CaCO ₃ =	<u>0</u> X 0.600 =	<u>0</u> as CO ₃ X 0.0333 =	<u>0</u> I.
J. Bicarbonate, as CaCO ₃ =	<u>1100</u> X 1.220 =	<u>1342</u> as HCO ₃ X 0.0164 =	<u>22.0088</u> J.
K. Total Anions =			<u>316.42808</u> K.
L. Total Dissolved Solids		k: <u>11782.4</u> L: <u>19002.548</u>	
M. Total Iron, as Fe	<u>2</u>		
N. Acidity to Phen., as CaCO ₃	<u>280</u> X 0.440 =	<u>123.2</u> as CO ₂	

OTHER PROPERTIES:

P. Sulfide, as H ₂ S	<u>0</u>	S. Turbidity	<u>11/9</u>
Q. Oxygen, as O ₂	<u>11/6</u>	T. Temperature, °F	<u>60.0°F</u>
R. pH	<u>7.0</u>	V. Spec. Grav.	<u>1.01</u>

COMMENTS:

DISTRICT/AREA: _____

ANALYST: Steve Masters / Mateo

DIRECTIONS:

Step 1: Complete tests in Column 1, and "Other Properties".

Step 2: Complete the multiplication steps for Columns 2 and 3, except Line A.

Step 3: In Column 3, add C, D, E to get subtotal. In Column 1, add G, H, I and J and enter total in 3K.

Step 4: Subtract subtotal from 3K and enter difference in 3A. In Column 3, add 3A to subtotal and enter in 3F.

Step 5: Multiply 3A by 23.0 and enter in 2A.

Step 6: Add column 2 Cations to get Total in 2F. Add Anions to get Total in 2K, and 2F to 2K to get 2L.