

# VISCO WATER ANALYSIS WORK SHEET

COMPANY Timka Resources LOCATION Washington County, Colorado  
 TIME 5-12-18 LEASE Ricky Wood Trust WATER SOURCE Water Tank

## TOTAL DISSOLVED SOLIDS:

CATIONS	Column 1 mg/l as compound	Column 2 mg/l as ions	Column 3 mg/l
A. Sodium		<u>7526.7498</u> as Na+ = 23.0X	<u>327.24995</u> A.
B. Total hardness, as CaCO <sub>3</sub> =	<u>900</u>		
C. Calcium, as CaCO <sub>3</sub> =	<u>800</u> X 0.400 =	<u>320</u> as Ca++ X 0.050 =	<u>16</u> C.
D. Magnesium, as CaCO <sub>3</sub> =	<u>100</u> X 0.243 =	<u>24.3</u> as Mg++ X 0.0823 =	<u>1.99989</u> D.
E. Barium, as BaSO <sub>4</sub> =	<u>0</u> X 0.589 =	<u>0</u> as Ba++ X 0.0149 =	<u>0</u> E.
F. Total Cations =		<u>7871.0199</u> Subtotal	<u>17.99989</u>
			<u>345.24994</u> F.
ANIONS			
G. Chloride, as NaCl =	<u>19000</u> X 0.607 =	<u>11533</u> as Cl- X 0.0282 =	<u>325.2306</u> G.
H. Sulfate, as Na <sub>2</sub> SO <sub>4</sub> =	<u>18</u> X 0.676 =	<u>15408</u> as SO <sub>4</sub> X 0.0206 =	<u>0.0112486</u> H.
I. Carbonate, as CaCO <sub>3</sub> =	<u>0</u> X 0.600 =	<u>0</u> as CO <sub>3</sub> X 0.0333 =	<u>0</u> I.
J. Bicarbonate, as CaCO <sub>3</sub> =	<u>1000</u> X 1.220 =	<u>1220</u> as HCO <sub>3</sub> X 0.0164 =	<u>20.008</u> J.
K. Total Anions =			<u>345.24994</u> K.
L. Total Dissolved Solids			<u>L</u>
M. Total Iron, as Fe	<u>14</u>	K: <u>12753.59</u>	
N. Acidity to Phen., as CaCO <sub>3</sub>	<u>240</u> X 0.440 =	L: <u>20624.587</u>	
		<u>10516</u> as CO <sub>2</sub>	

## OTHER PROPERTIES:

P. Sulfide, as H <sub>2</sub> S	<u>0</u>	S. Turbidity	<u>n/g</u>
Q. Oxygen, as O <sub>2</sub>	<u>n/g</u>	T. Temperature, °F	<u>60°F</u>
R. pH	<u>7.1</u>	V. Spec. Grav.	<u>1.013</u>

## COMMENTS:

DISTRICT/AREA: \_\_\_\_\_ ANALYST: Steve Masters / Nalco

## 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. Add 2F and 2K to get 2L.