Alkalinity Unknown Data Sheet

Volunteer (School) Group:_____ Test Date:___/___/___

Alkalinity Unknown Batch: _____

Test 1:

Part 1 – Phenolphthalein Alkalinity

1. Did you clean your Erlenmeyer flask and cylinder with deionized water? Yes No
2. Amount of Alkalinity Unknown used: _____ mL
3. Add 15 drops of phenolphthalien indicator.
4. Did the sample turn pink after phenolphthalien was added to flask? Yes No

If YES → continue on to step 5.
If NO → record phenolphthalein alkalinity as 0.0 mg/L on line 5, and then go to part 2.

5. Titrate from a pink to a clear. Read your burette and record mL of H2SO4 you added. _____ mL
6. Multiply mL of H2SO4 used by 40. Record this as the phenolphthalein alkalinity:

Phenolphthalein Alkalinity Result _____mg/L $CaCo_3$

!! DO NOT re-zero your burette between phenolphthalein alkalinity and total alkalinity! Total is a combination of them both!!

Part 2 – Total Alkalinity

7. Add 6 drops of BGMR solution. Did solution turn blue/turquoise? Yes No
8. Titrate from turquoise to pink-gray, record the mL of H2SO4 added. _____ml H2SO4

   Read burette carefully! This is the end point of titration.
9. Multiply mL of H2SO4 (line 8) used by 20. (mL H2SO4 used) x 20 = _____**mg/L CaCO3**

Comments_____

_____

Volunteer Signature: _____ Date recorded _____

Turn page over for test 2.

Alkalinity Unknown Data Sheet

Alkalinity Unknown Batch: _____

Test 2:

Part 1 – Phenolphthalein Alkalinity

1. Did you clean your Erlenmeyer flask and cylinder with deionized water? Yes No
2. Amount of Alkalinity Unknown used: _____ mL
3. Add 15 drops of phenolphthalien indicator.
4. Did the sample turn pink after phenolphthalien was added to flask? Yes No

If YES → continue on to step 5.
If NO → record phenolphthalein alkalinity as 0.0 mg/L on line 5, and then go to part 2.

5. Titrate from a pink to a clear. Read your burette and record mL of H_2SO_4 you added. _____ mL
6. Multiply mL of H_2SO_4 used by 40. Record this as the phenolphthalein alkalinity:

Phenolphthalein Alkalinity Result _____ mg/L $CaCo_3$

!! DO NOT re-zero your burette between phenolphthalein alkalinity and total alkalinity! Total is a combination of them both!!

Part 2 – Total Alkalinity

7. Add 6 drops of BGMR solution. Did solution turn blue/turquoise? Yes No
8. Titrate from turquoise to pink-gray, record the mL of H_2SO_4 added. _____ml H_2SO_4

Read burette carefully! This is the end point of titration.

9. Multiply mL of H_2SO_4 (line 8) used by 20. (mL H_2SO_4 used) x 20 = _____**mg/L $CaCO_3$**

Comments_____

_____

Volunteer Signature: _____ Date recorded _____

Average the 2 test results:

Test 1 result:_____Test 2 result:_____Average: _____

_____

Alkalinity Unknown True Value (to be completed by RW Staff). _____**mg/L $CaCO_3$**

Entered/Validated by RW staff: _____ **Date:** _____