

Alkalinity Data Sheet

Station Name _____

Station Number _____

River/Stream _____

Date of sample ___/___/___

Volunteer Group _____

Time of sample ___ : ___

PART I - Phenolphthalein Alkalinity

1. Amount of sample used (should be 50ml): _____ mL

2. pH value _____ S.U.

Is pH greater than 8.3? Yes No

3. Add phenolphthalein indicator. Did solution turn pink? Yes No

If **YES** → continue with step 4.

If **NO** → record phenolphthalein alkalinity as 0.0 mg/L, and then go to part II.

4. Titrate from a pink to a clear, record mL of H₂SO₄ you added. _____ ml H₂SO₄ used

5. Multiply mL of H₂SO₄ used by 40. Record this as the phenolphthalein alkalinity.

Example: 0.2 ml H₂SO₄ titrant used x 40 = 8.0 mg/L CaCO₃

Phenolphthalein Alkalinity Result _____ mg/L CaCO₃

(Note: If you have phenolphthalein alkalinity, DO NOT rezero the buret before continuing.)

PART II - Total Alkalinity

6. Add BGMR indicator. Did solution turn blue? Yes No

7. Titrate from turquoise to pink-gray. Record mL of H₂SO₄ added. _____ ml H₂SO₄

8. Multiply ml of H₂SO₄ used by 20. This is the total alkalinity.

Example: 2.5 ml H₂SO₄ titrant used x 20 = 50.0 mg/L

Total Alkalinity result _____ mg/L CaCO₃

Comments: _____

Data Recorded by: _____ Date: _____