CONVERSION AND DATA REPORTING FOR BENTHIC CHLOROPHYLL A, PHEOPHYTIN & AFDM_ALGAE ~ WATERCOLUMN (MASS/VOLUME) TO BENTHIC (MASS/AREA) ~

CONVERSION

- $\frac{\text{WaterColumn Value} \times \text{CompositeVolume}}{\text{GrabSize}}$ or (WaterColumn Value) x (Composite Volume) / Grab Size

- MUST be done on all 4 values where WaterColumn Value equals:
  - Result
  - MDL
  - RL
  - Expected value

- For Samples:
  - Volume Filtered (ml), Composite Volume (ml) and Grab Size (cm2) will be provided on the COC
  - If these values are not provided on the COC, contact the field crew and/or project manager for this information

- For LABQA and Non-Project samples:
  - Default Composite Volume: 500 ml
  - Default GrabSize: 138.6 cm2

REPORTING

- Report results to 2 decimal places
- Blanks must be reported with all batches including Pheophytin
- Benthic batches will have _B_ in the LabBatch ID for benthic matrix
- WaterColumn and benthic results need to be **analyzed in different batches** so they must be **reported as two separate batches** each having it's own set of QC
- AFDM_Algae batches will have an AFDM at the end for the acronym – not AFDM_Algae

SAMPLE

- Matrix: benthic
- Analyte: AFDM_Algae, Chlorophyll a, or Pheophytin
- Fraction: Particulate
- Chl and Pheo Unit: mg/m2
- AFDM Unit: g/m2

LABQA

- Matrix: blankwater
- Analyte: AFDM_Algae, Chlorophyll a, or Pheophytin
- Fraction: Total
- Chl and Pheo Unit: mg/m2
- AFDM Unit: g/m2

EXAMPLE

Example of conversion for Chlorophyll a or Pheophytin:

[300 ug/L x (1 mg/1000ug)] x [535mL x (1 L/1000mL)] / [138.6cm2 x (1m2/10,000cm2)] = 11.58 mg/m2

Example of conversion for AFDM_Algae:

[412 mg/L x (1 g/1000mg)] x [535mL x (1 L/1000mL)] / [138.6cm2 x (1m2/10,000cm2)] = 15.90 g/m2