GLOBE Salinity Data Sheets

Print the Salinity Data Sheet:

- Salinity Data Sheet

Or select an alternative option below:

- Salinity: New Site (2 pages)
  - Use this the first time you visit a sampling site to record site definition data.
- Salinity: Weekly Measurements
  - This data sheet has space to record weekly salinity measurements.
- Salinity with field guide (2 pages)
  - This data sheet has the field guide incorporated.

Salinity Conversion Table is appended to the end of this document

- Salinity Conversion Table (3 pages)
  - Use this table to find the salinity using specific gravity and water temperature

GLOBE Salinity Data Sheet

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Water State: ☐ Normal ☐ Flooded ☐ Dry ☐ Frozen ☐ Unreachable

If anything except Normal is selected, stop here!

Time of high or low tide ***before*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Time of high or low tide ***after*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Location of tide: _____

Salinity Measurements

Sample	**Temperature of water sample in 500 ml tube** (°C)	**Specific Gravity**	**Salinity** (ppt)
Sample #1			
Sample #2			
Sample #3			

Average Salinity: _____ ppt

Stop and Check: Are all measurements within 2 ppt of the average? If not, repeat the measurements and calculate a new average.

Comments:

GLOBE Salinity Data Sheet: New Site (page 1)

Name: _____ Site Name: _____

Date: _____ Time (local): _____

New Site Definition

Latitude: _____ Longitude: _____

Elevation: _____ m

Name of Water Body: _____

Water Body Type: ☐ Unknown ☐ Saltwater ☐ Freshwater ☐ Brackish

Water State: ☐ Normal ☐ Flooded ☐ Dry ☐ Frozen ☐ Unreachable

If anything except Normal is selected, stop here!

Time of high or low tide ***before*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Time of high or low tide ***after*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Location of tide: _____

Salinity Measurements

Sample	**Temperature of water sample in 500 ml tube** (°C)	**Specific Gravity**	**Salinity** (ppt)
Sample #1			
Sample #2			
Sample #3			

Comments:

Stop and Check: Are all measurements within 2 ppt of the average? If not, repeat the measurements and calculate a new average.

GLOBE Salinity Data Sheet: New Site (page 2)
Optional Site Definition Information

Water Body Source: _____

Can you see the bottom? ☐ Yes ☐ No

Water Sampling location:

☐ Outlet ☐ Bank ☐ Bridge ☐ Boat ☐ Inlet ☐ Pier

Channel/Bank Material:

☐ Soil ☐ Rock ☐ Concrete ☐ Vegetated Bank

Bedrock:

☐ Granite ☐ Limestone ☐ Volcanics ☐ Mixed Sediments ☐ Unknown

Freshwater Habitats Present:

☐ Rocky Substrate ☐ Vegetated Bank ☐ Mud Substrate ☐ Sand Substrate
☐ Submersed Vegetation ☐ Logs

Saltwater Habitats Present:

☐ Rocky Shore ☐ Sandy Shore ☐ Mud Flats/Estuary

If the water body source is a **river** or **stream**:

Width of moving water: _____ meters

If the water body source is a **pond, lake, reservoir, bay, ditch** or **estuary**:

Area of standing water: _____ km^2

Average depth of standing water _____ meters

GLOBE Salinity Data Sheet: Weekly

Name: _____ Site Name: _____

Time of high or low tide ***before*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Time of high or low tide ***after*** salinity measurement (24hr):_____

Check one: ☐ High Tide ☐ Low Tide

Location of tide: _____

Salinity Measurements (use temperature and specific gravity to determine salinity)

*Water State Options: N = Normal, Fl = Flooded, D = Dry, Fr = Frozen, U = Unreachable.

If anything except Normal is selected, do not collect measurements.

Date	**Time (local)**	**Water State***	**Sample 1** (ppt)	**Sample 2** (ppt)	**Sample 3** (ppt)	**Average** (ppt)

Comments:

Stop and Check: Are all measurements within 2 ppt of the average? If not, repeat the measurements and calculate a new average.

GLOBE Salinity Data Sheet and Field Guide (page 1)

Name: _____ Site Name: _____

Date: _____ Time (local): _____

Water State: ☐ Normal ☐ Flooded ☐ Dry ☐ Frozen ☐ Unreachable

If anything except Normal is selected, stop here!

Salinity Measurements

1. Record the times of the high and low tide that occur before and after your salinity measurement is taken. Also record the place where the times from your Tide Table occur.

Time of high or low tide ***before*** salinity measurement (24hr):_____	Time of high or low tide ***after*** salinity measurement (24hr):_____
Check one: ☐ High Tide ☐ Low Tide	Check one: ☐ High Tide ☐ Low Tide

Location of tide: _____

2. Put on protective gloves.
3. Rinse the 500-mL cylinder with sample water twice.
4. Fill the cylinder with sample water to within 2 or 3 cm of the top.
5. Measure and record the temperature of the water in the cylinder.

Temperature of water sample in 500 mL tube: _____ °C

6. Gently put the hydrometer into the cylinder.
7. Wait for the hydrometer to stop bobbing. It should not touch the sides of the cylinder.
8. Read the hydrometer at the bottom of the meniscus. Read and record the specific gravity to three decimal places.

Specific gravity: _____

9. Look up the specific gravity and water temperature on the Conversion Table to find the salinity of the water. Record the salinity.

Salinity: _____ ppt

10. Repeat steps 3-9 using new samples of water. Record data on the data table on page 2.

GLOBE Salinity Data Sheet and Field Guide (page 2)

Salinity Measurements Continued

Sample	**Temperature of water sample in 500 ml tube** (°C)	**Specific Gravity**	**Salinity** (ppt)
Sample #1 (from page 1)			
Sample #2			
Sample #3			

11. Calculate the average of the three salinity measurements and record below.

Average Salinity: _____ ppt

12. **Stop and Check:** Are all measurements within 2 ppt of the average? If not, repeat the measurements and calculate a new average.

Comments: