OARC Recharge Services

The OARC can analyze seawater samples for Dissolved Inorganic Carbon (DIC), Total Alkalinity (TA), and dissolved oxygen on a recharge basis.

**DIC/TA**

The OARC runs all DIC and TA samples on Marianda equipment. We operate two VINDTAs for TA analysis and an AIRICA for DIC analysis.

**DIC/TA Sample Submissions**

All potential clients must submit a brief project description to Natalie Monacci (nmonacci@alaska.edu) to begin a new business agreement. This is to ensure that the suitability of the OARC instrumentation, sample analysis rates, and associated deadlines are known in advance of sample submissions. Once a new project is approved, samples must be submitted as follows:

1. All bottles must be sampled correctly, including but not limited to a tight fitting cap, appropriate headspace volume, >200mL total volume, treated with mercuric chloride upon sampling, and labeled with a brief sample ID.
2. All samples must be submitted with a digital sample list including a brief sample ID, temperature, salinity, and depth.
3. All shipping will be prearranged or billed in addition to the sample rate.
4. A PO must be set up and approved through our business office before analysis will begin.

Sample analysis time may range between one and six months after the samples are received.

The OARC can provide sample bottles, boxes, and sampling supplies, if discussed ahead of time. The cost to replace the supplies will be charged if not returned within one year.

**DIC/TA Current Rates**

<table>
<thead>
<tr>
<th>Type</th>
<th>User</th>
<th>OARC bottles</th>
<th>Rate per sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIC/TA</td>
<td>Non-student</td>
<td>No</td>
<td>$107</td>
</tr>
<tr>
<td>DIC/TA</td>
<td>Non-student</td>
<td>Yes</td>
<td>$110</td>
</tr>
<tr>
<td>DIC/TA</td>
<td>UAF student</td>
<td>Yes</td>
<td>$60*</td>
</tr>
</tbody>
</table>

*UAF students must submit a project description with additional approval from their main adviser. The reduced rate is limited to 100 samples. The student must be present in Fairbanks to assist with various lab duties during the sample analysis.

**DIC/TA Shipping**

Bottles are frequently broken, so please pack appropriately to minimize loss. If samples are extremely valuable, please take two samples.

**USPS, UPS, and FedEx (small shipments)**

2150 Koyukuk Drive
245 O’Neill Building
Fairbanks, AK 99775

**All Large shipments (fish totes, pallets, etc)**

2140 Koyukuk Drive
Irving Loading Dock
Fairbanks, AK 99775

OARC Contact:
Natalie Monacci
nmonacci@alaska.edu
907-474-7956
**Dissolved Oxygen**

The OARC runs Langdon Enterprises’ Amperometric Oxygen Titrators, which determines the dissolved oxygen concentration in seawater using the Winkler method.

**Dissolved Oxygen Sample Submission**

All potential clients must submit a brief project description to the Natalie Monacci (nmonacci@alaska.edu) to begin a new business agreement. This is to ensure that the suitability of the OARC instrumentation, sample analysis rates, and associated deadlines are known in advance of sample submissions. Once a new project is approved, required sampling supplies and protocol will be discussed and samples must be submitted as follows:

1. All bottles must be sampled correctly, including but not limited to: pickling with reagents, appropriate volume, stored upright, neck filled with DI water, and tops wrapped in plastic to prevent evaporation.
2. All samples must be submitted with a digital sample list including the flask ID number, temperature, salinity, density, sensor oxygen concentration (when available) and depth.
3. A PO must be set up and approved through our business office before sampling supplies are loaned out or analysis will begin.

Due to the nature of these samples, analysis must be done as soon as possible. Please confirm your schedule with Monacci ahead of time.

**Dissolved Oxygen Current Rates**

- Analysis will require a minimum $130 per day, flat fee. This covers the time and supplies needed to calibrate the titrator.
- After the daily fee, there is a $10 per sample charge.

**Dissolved Oxygen Supplies**

The OARC has supplies to loan out for the collection of samples. Please request supplies at least two weeks ahead of time to ensure that we have materials available for your fieldwork. If supplies are returned broken or dirty, charges will apply.

**Supplies Rates:**

- $65 hr$^{-1}$ for OARC personnel to prepare chemicals for pickling and to pack and prepare supplies. Please contact for detailed estimate.
- $50 per broken sample flask. Each sample flask is carefully calibrated and has unique identification information.
- $600 per Socorex reagent dispenser.

**Oxygen Sample Shipping**

The OARC can only accept hand delivered samples at this time.

336 Irving II  
907-474-5243  

Natalie Monacci  
nmonacci@alaska.edu  
907-474-7956