### Materials List for:

**Sediment Core Sectioning and Extraction of Pore Waters under Anoxic Conditions**

Alison R. Keimowitz¹, Yan Zheng², Ming-Kuo Lee³, Michael Natter³, Jeffrey Keevan³

¹Department of Chemistry, Vassar College
²Division of Geochemistry, Lamont-Doherty Earth Observatory
³Department of Geosciences, Auburn University

Correspondence to: Alison R. Keimowitz at alspodek@vassar.edu

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#### Materials

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Catalog Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable glove bag(s)</td>
<td>Sigma-Aldrich</td>
<td>Z106089-1EA</td>
<td>One per two cores to be processed is usually sufficient.</td>
</tr>
<tr>
<td>N₂ tank</td>
<td>Praxair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen gas regulator</td>
<td>VWR</td>
<td>55850-478</td>
<td>Or similar; Often gas supply companies can deliver these directly to the laboratory.</td>
</tr>
<tr>
<td>Several feet of tubing that fits the regulator</td>
<td>VWR</td>
<td>89403-862</td>
<td>Or similar</td>
</tr>
<tr>
<td>Safety equipment to secure the tank</td>
<td>VWR</td>
<td>60142-006</td>
<td></td>
</tr>
<tr>
<td>Adjustable tubing clamp</td>
<td>VWR</td>
<td>62849-112</td>
<td></td>
</tr>
<tr>
<td>Waterproof, good sealing electrical tape</td>
<td>Scotch</td>
<td>Super 33+</td>
<td>Widely available</td>
</tr>
<tr>
<td>2-4 short bungee cords</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Squirt bottles of nanopure water</td>
<td>VWR</td>
<td>16650-082</td>
<td>Any similar bottle is fine; pack an additional supply of nanopure water to refill these.</td>
</tr>
<tr>
<td>Large supply of paper towels and Kimwipes</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>50 ml centrifuge tubes</td>
<td>VWR</td>
<td>21008-951</td>
<td>Acid cleaned as described in protocol. At least 2/core section needed.</td>
</tr>
<tr>
<td>Several permanent in markers.</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Several straight razor blades and box cutters</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Centrifuge</td>
<td>Beckman-Coulter</td>
<td>Allegra X-22</td>
<td>Faster rotor allows greater separation.</td>
</tr>
<tr>
<td>Rotor to accommodate 50 ml tubes</td>
<td>Beckman-Coulter</td>
<td>SX-4250</td>
<td></td>
</tr>
<tr>
<td>50 ml plastic syringes without black rubber tip on the barrel</td>
<td>VWR</td>
<td>66064-764</td>
<td>Acid cleaned as described in protocol. At least 1/core section needed, plus 1 for overlying water.</td>
</tr>
<tr>
<td>Syringe filters compatible with aqueous solutions.</td>
<td>VWR</td>
<td>28143-310</td>
<td>Either 0.45 μm or 0.20 μm poresizes may be used. Plan on five filters per core section processed.</td>
</tr>
<tr>
<td>Plastic (disposable) spoons.</td>
<td></td>
<td></td>
<td>Widely available; Acid cleaned as described in protocol.</td>
</tr>
<tr>
<td>Several boxes of disposable gloves.</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Item</td>
<td>Supplier</td>
<td>Code</td>
<td>Notes</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Large plastic beakers or other waste containers to place in the glove bag.</td>
<td>VWR</td>
<td>13890-148</td>
<td></td>
</tr>
<tr>
<td>Laboratory balance</td>
<td>VWR</td>
<td>10205-008</td>
<td>An available balance will be fine; high precision not required</td>
</tr>
<tr>
<td>Dry shipper, pre-charged with liquid nitrogen</td>
<td>VWR</td>
<td>82005-416</td>
<td>Needed only if samples are being returned to the home laboratory for sensitive analyses.</td>
</tr>
<tr>
<td>Laboratory notebooks</td>
<td></td>
<td></td>
<td>Water repellent can be useful</td>
</tr>
<tr>
<td>Core liners</td>
<td>Watermark</td>
<td>77280</td>
<td>Available from Forrestry Suppliers</td>
</tr>
<tr>
<td>Core caps</td>
<td>Ben Meadows</td>
<td>218105</td>
<td></td>
</tr>
<tr>
<td>Core slicers</td>
<td>McMaster Carr</td>
<td>8707K111</td>
<td>Cut this into 9 x 3 squares</td>
</tr>
<tr>
<td>PVC spacers</td>
<td>McMaster Carr</td>
<td>48925K96</td>
<td>Cut this into short lengths</td>
</tr>
<tr>
<td>PVC couplings</td>
<td>McMaster Carr</td>
<td>4880K76</td>
<td>Approximately 12 needed</td>
</tr>
<tr>
<td>Dowel</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Lab stopper</td>
<td>VWR</td>
<td>59580-400</td>
<td>Check to ensure the correct size to fit snugly within the core liners</td>
</tr>
<tr>
<td>Plywood for core guidance plate and top of lab jack</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Lab jack</td>
<td>VWR</td>
<td>89260-826</td>
<td></td>
</tr>
<tr>
<td>Clamps</td>
<td></td>
<td></td>
<td>Widely available</td>
</tr>
<tr>
<td>Portable oxygen monitor</td>
<td>RKI instruments</td>
<td>OX-07</td>
<td></td>
</tr>
</tbody>
</table>