

Purifics has lab-scale systems of its water purification technologies for in-house testing of water samples to quickly quantify the purification challenge. This provides clients the opportunity to validate process performance and estimate operating requirements and costs. The lab scale systems provide a reasonable representation of full scale systems. Typically, an onsite pilot test will follow a bench test to validate sustainability and optimize with actual on-site water.

Typically, one or two 5 Gallon (20L) water samples are required for bench testing. Our goal in performing a bench test is to demonstrate purification of contaminants of concern to the clients' specifications. A series of tests are conducted on the water sample to demonstrate and quantify process performance. Purifics will generate contaminant reduction curves versus energy input from the test data, which supports budgetary capital and operating cost projections.

Treated samples are shipped back to the client, or to the client's preferred laboratory for analysis, or Purifics can manage the sample collection and analysis using a local certified independent laboratory.

Clients are encouraged to visit Purifics to observe and participate in the testing. Client will specify the disposition of all remaining test fluids; they can be shipped back to the client's facility, or appropriately disposed of locally if preferred. The client is responsible for all shipping costs to and from Purifics. Depending on the nature of the samples, a nominal charge may apply for bench testing, and it will be determined in advance if applicable.

Sample Collection

Collect & Express ship samples early in the week (Mon/Tues); avoid weekend hold times

- Only use new (unused) plastic 19L (5 Gallon) DOT-Approved containers.
- Collapsible or rigid containers fit securely in 52-quart cooler:
 - Readily available online through McMaster Carr [mcmaster.com]: # 4935T9 5-gal containers; # 4283T64 52-qt cooler.
- Properly label each container.
- Fill containers as full as possible to reduce headspace and prevent volatilization and oxidation.
- Pack samples in ICE when VOC's are present.
- Pack Sample Submittal Form (Chain of Custody) in sealed zip-lock baggie; ID target pollutants and treatment limits.
- Close the cooler and tape and seal the lid shut.
- Ensure containers are tightly sealed to prevent leakage during transport.



Shipping Suggestions

- Obtain Purifics' prior approval and reference number; **Do Not Ship Without it.**
- Comply with all DOT regulations, including placards, drum labeling and MSDS if applicable.
- Purifics Shipping & Receiving: Open Monday through Friday, 8:00 am - 4:30 pm EST except holidays.



Point of Contact

- Prior to shipping samples, contact Bonnie Lunn (blunn@purifics.com or 519-473-5788 x221) for reference number and customs paperwork preparation.

Cross Border Shipping Requirements

PROVIDE INFORMATION TO PURIFICS FOR CUSTOMS PAPERWORK (Email info@purifics.com)

- Company Name (in full), Address & Zip Code
- Contact Name, Title, Phone & Fax
- Total Number of Coolers Being Shipped
- Origin of Sample (i.e. City, State)
- Date of Shipment & Shipping Company (i.e. FedEx, UPS)

- Purifics will prepare and return email the customs paperwork for the shipment.
- Customs paperwork to be placed in a clear envelope on the outside of the first container. Clear envelopes can be provided by the carrier.
- Suggested shipping companies or additional assistance available if required.



Sample Evaluation & Management

- Client must specify method for sample analysis:
- Submit Collected Samples to Client's Party Laboratory
- Submit Collected Samples to Local 3rd Party Laboratory by Purifics
- Sample Return to Client for evaluation
- Other Options to be Determined
- As necessary, Client must provide return instructions for treated samples including return shipping address, IRS/tax identification number, contact name and phone number, carrier information and client account number.

In-House Bench Testing Equipment



Cuf (Ceramic Ultra Filtration)

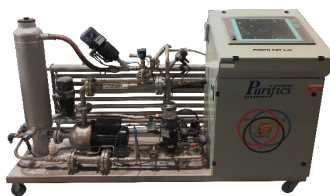


Photo-Cat (AOP+)



DeWRS (DeWatering Recovery System)



SDI (Salt Density Index)



RO (Reverse Osmosis LP)