

Nebraska Department of Water, Energy, and Environment

Standard Operating Procedure (SOP)

Groundwater Division - GW

SOP Number: GW-180

Title: Laboratory Selection for Analysis of Groundwater Samples

Written Date: July 2025

Purpose: To select analytical laboratories for analysis of ground water samples in a manner which ensures accurate sample analysis and cost effectiveness.

Equipment/Materials Needed:

- Approval for and basic framework of a ground water study or investigation as per SOPs # GW-010 and 020 or other appropriate SOPs.

Procedures:

1. For all ground water analyses, you must first check with the DHHS Public Health Environmental Lab to see if they have the analytical capability (e.g. appropriate equipment, methodology, etc.) and the logistical ability (e.g. the priority of your samples vs. other program commitments, adequate staffing, etc.) to perform the analyses.
 - 1.1. Perform this step as early as possible.
2. If DHHS can provide the necessary services, initiate a laboratory services request.
 - 2.1. Consult with the Groundwater Section Supervisor and other Groundwater Section program personnel to determine what analytical services are required.
 - 2.2. Contact the DHHS Public Health Environmental Lab by phone or e-mail and discuss your analytical needs, schedule, and any special requirements.
 - 2.3. Follow up this verbal or electronic conversation with a written request outlining your needs. Route the request to the following:
 - Groundwater Section Supervisor
 - DHHS Public Health Environmental Lab Supervisor (addressee)
 - 2.4. Follow the request and ensure that it proceeds through all channels in a timely manner.

3. If DHHS cannot provide the necessary services, select an outside laboratory.
 - 3.1. Follow the process for procurement of services as outlined in the procurement notebook. Contact the Water Quality Division Assistant Director (via the Groundwater Section) for this information.
 - 3.2. When selecting an outside lab, consider the following items:
 - Ability to provide necessary analyses
 - Availability of appropriate methodologies and detection levels
 - Location
 - Flexibility regarding schedules
 - Cost of analyses
 - Availability of materials (e.g. acid, sample containers, deionized water, etc.)
 - Qualifications of staff
 - QA/QC plan available (request a copy if lab is selected)
 - USEPA or other certifications
 - 3.3. Before selecting a lab, visit it in person (if possible) or at least talk to lab personnel via phone to discuss the above considerations and any other items necessary to your work.
 - 3.4. Select the lab which best meets the criteria of your work and document the reasons for laboratory selection.