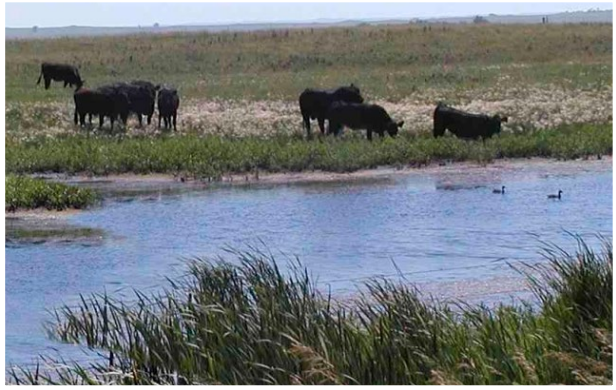
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# Livestock Water Testing GUIDELINES

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## Sample Protocol

1. Collect sample in a clean 1-quart or larger plastic (preferred) or glass container.
   a. Sample containers can be obtained from your NDSU Extension county office or your local Soil Conservation District watershed coordinator.
   b. The Astro Chem Lab prefers you contact it to get a sample kit/container.
2. Collect sample from the area where livestock are drinking. If collecting cyanobacteria (blue-green algae), take a sample in the bloom and wear gloves because it can be toxic to humans.
3. Rinse container several times using water to be sampled
4. Fill container completely. Be sure to collect water from deeper in the water and the surface.
5. Label container with the following information:
   a. name of waterbody
   b. name of sampler
   c. date collected
   d. time collected
6. Seal the container tightly and wrap the top with tape to prevent leaking. Place the water in a sealed plastic bag.
7. Complete laboratory sample custody form required to be submitted with the sample. Contact the laboratory if needed
8. If submitting a cyanobacteria sample, **ship immediately** on an ice pack (**no wet ice, please**) by next-day delivery. Do not freeze the sample or leave it on your vehicle's dashboard (avoid temperature extremes). Fresh samples yield the best results. Many samples begin to degrade rapidly after collection; therefore, samples should be received by the laboratory within 24 hours whenever possible.

   *We recommend collecting and shipping samples before Friday to avoid shipping delays.

## Testing Labs

### NDSU Veterinary Diagnostic Laboratory

**701-231-7527 or 701-231-8307** • www.vdl.ndsu.edu

- Water screen: nitrates, pH, total dissolved solids (TDS), sulfates
  - Cost: $35 for test and $12 submission fee (submission paid once when submitting multiple samples)
- Cyanobacteria (blue-green algae) Identification
  - Cost: $22 for test and $12 submission fee (submission paid once when submitting multiple samples)
- Cyanotoxins
  - Cost: $200 for test and $12 submission fee
- Turnaround: Within one day of samples arriving at lab
- Shipping:

**U.S. Postal Service**
Veterinary Diagnostic Laboratory
NDSU Dept. 7691
PO Box 6050
Fargo, ND 58108-6050

**FedEx/UPS**
Veterinary Diagnostic Laboratory
4035 19th Ave. N.
Fargo, ND 58102

### North Dakota Department of Environmental Quality – Chemistry Division

- General Water: pH, sulfate, nitrate +nitrite, total dissolved solids (TDS)
  - Cost: $116.52–$128.18
- Arsenic (not included in the water screen)
  - Cost: $34.96–$46.62
- Turnaround: Approximately two weeks
- Shipping:
  - Samples **must** be cooled with an ice pack.
  - Samples **must** arrive at the lab within 48 hours of collection.
- Shipping: Environmental Quality Chemistry Laboratory
  2635 East Main Ave
  Bismarck, ND 58501

### Minnesota Valley Testing Laboratories Inc.

**701-258-9720** • www.mvtl.com

- Water screen: nitrates, conductivity, total dissolved solids (TDS), sulfates
- For specific tests and current pricing, contact MVTL at 701-258-9720 or visit www.mvtl.com.
- Turnaround: 10 days
- Shipping: Minnesota Valley Testing Laboratories
  2616 East Broadway Ave.
  Bismarck, ND 58501

### Astro Chem Lab Inc.

**701-572-7355** • http://astrochemlab.com

- Water screen: pH, conductivity, residual sodium carbonate, hardness, sodium adsorption ratio, total dissolved solids, sodium chloride, calcium, magnesium, sodium, iron, potassium, chloride, carbonate, bicarbonate, sulfate and nitrate + nitrate-N
  - For current pricing, call 701-572-7355
- Turnaround: 5–10 business days
- Shipping: Astro Chem Lab
  4102 2nd Ave. W.
  PO Box 972
  Williston, ND 58802

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