

# NITRATE TEST - FORAGE SAMPLES

Name: \_\_\_\_\_

What will this forage be fed to:

Business/Ranch Name: \_\_\_\_\_

Cows/Bulls

Mailing Address: \_\_\_\_\_

Feeders

City, State, Zip: \_\_\_\_\_ MT

Pregnant Cows

Phone Number: (\_\_\_\_\_) \_\_\_\_\_ Date: \_\_\_\_\_

Cow/Calf Pairs

Email Address: \_\_\_\_\_

Horses

Forage Type: \_\_\_\_\_

Sheep

Acres: \_\_\_\_\_  Standing  Cut  Baled

Goats

Other: \_\_\_\_\_

Nitrate testing is recommended for any small grains forage, cover crop, and forage that has been stressed. Oats and barley tend to accumulate the highest levels of nitrates, but it can be seen in turnips, radishes, clover, alfalfa, grass and even weeds.

## Recommended Sampling Procedures:

If you collect **standing forage** for testing, bring 8-10 whole plants (from the ground up) from multiple locations in the field. If it is a pivot, make sure you get plants from both the inside and outside of the field. If testing **baled hay**, collect core samples from at least 10% of the bales from a field. A hay probe is available at the office to borrow.

## Nitrate Test Options:

- Nitrate Quik Test** – This test is done by the Extension Agent. It uses a combination of chemicals that determine the presence of nitrates. It doesn't say specifically how much, but is an indicator if further testing is needed (either a strip test and/or lab). A recent MSU study determined that this test has a 69% accuracy. However, there is an 80% chance of a false negative. The other challenge with this test is that the stems must have moisture in them. **It needs to be done BEFORE you cut and cannot be used on dry hay.** If the test indicates high nitrates, recommendations can be made to try to decrease nitrates before cutting.
- Nitrate Strip Test** – This option is also done by the Extension Agent. It can be done on green or dry forage. It provides a range of possible nitrate levels. At high levels, a lab test is still recommended. The MSU study determined that this test has a 73% accuracy with fewer false negatives.
- Nitrate Lab Test** – Any forage testing lab can provide this for you. If you want to work with our office, Midwest Labs will be used which costs \$21 plus shipping. It provides you with an exact level of nitrates. Regardless of the lab you choose, make sure that you get recommendations specific for Montana. Many labs will provide recommendations for Nebraska or Pennsylvania. Because we have an arid climate and higher nitrate levels naturally in our environment, our recommendations tend to be more conservative than other states.

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## Office Use Only

Sample Size:  Small  Adequate

Results: \_\_\_\_\_

Recommendations:  Get a Lab Test  Feed as-is  Ration Out  $\frac{1}{4}$   $\frac{1}{3}$   $\frac{1}{2}$  with Other Feeds  DO NOT FEED

Comments: \_\_\_\_\_

\_\_\_\_\_ Date Results Reported: \_\_\_\_\_