

Report No. \_\_\_\_\_

Instructions for filling out this form are given on the back side

LOCATION REFERENCE (if different than "mail reports to" address) Name _____ Address _____ City, State, Zip _____ Phone _____	Email (if preferred): _____ Sample Location County _____ Out-of-state submitters: Please visit <a href="https://soiltest.cfans.umn.edu/">https://soiltest.cfans.umn.edu/</a> for a map of quarantined areas. Amount \$ _____ <input type="checkbox"/> check <input type="checkbox"/> cash <input type="checkbox"/> credit card <input type="checkbox"/> account	MAIL REPORTS TO: Name _____ Address _____ City, State, Zip _____ Phone _____
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Sample Identification		1 Crop History						2 Proposed Crops						3 Test(s) Requested (see back page for depth)									
Laboratory Number (Lab Use Only)	Field or Sample number or letter	Check if irrigated	Before Last Crop Grown		Last Grown Crop		Option 1		Option 2		Option 3		Regular Series P, K, pH, %OM	Sulfur*	Zinc, Iron, Copper, Manganese	Boron	Calcium and Magnesium	Lead	Nutrient Mgmt P	Soluble Salts	Nitrate		
			Crop Code No.	If Alfalfa check # plants per sq ft	Crop Code No.	If Alfalfa check # plants per sq ft	Crop Code No.	expected yield	Crop Code No.	expected yield	Crop Code No.	expected yield	\$19	\$8	\$14	\$8	\$8	\$20	\$8	\$8	Please read the section about this test on the back of this page. Sampling to 24" is required for this test.		
			<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1	<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																		\$8 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
			<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1	<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																		\$8 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
			<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1	<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																		\$8 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
			<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1	<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																		\$8 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
			<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1	<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																		\$8 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	

Recommendations available for these crops:

\*See comments on the back of this page.

Crop Code	Name	Yield Unit	10. Barley	bu/acre	24. Rape/Mustard/Canola	cwt/acre	39. Celery	55. Apples
<b>LEGUMES</b>			11. Oats	bu/acre	25. Sorghum Sudan	-	40. Cucumbers	56. Blueberries
01.	Alfalfa, new seed	ton/acre	12. Rye/Triticale	bu/acre	26. Soybeans	bu/acre	41. Lettuce	57. Grapes
02.	Alfalfa, established	ton/acre	13. Wheat	bu/acre	27. Sugarbeets	tons/acre	42. Melons	58. Raspberries/Brambles
03.	Birdsfoot Trefoil	ton/acre	<b>MISCELLANEOUS</b>		28. Sunflowers	lb/acre	43. Onions, dry	59. Strawberries
04.	Legume/Grass Hay	ton/acre	14. Buckwheat	lb/acre	29. Wild Rice	-	44. Onions, green	
05.	Legume/Grass Pasture	-	15. Edible Beans	lb/acre	<b>VEGETABLES</b>		45. Parsnips	<b>TURF</b>
06.	Red Clover	ton/acre	16. Fallow	-	30. Asparagus, new planting		46. Peas	60. Cultured Sod
<b>CORN</b>			17. Flax	bu/acre	31. Asparagus, establ. planting		47. Peppers	<b>NURSERY - FIELD STOCK TREES/SCRUBS</b> Suggested tests: Regular, Soluble Salts, Nitrate. For sampling instructions, please see Nursery Form
07.	Corn, grain	bu/acre	18. Grass Hay	tons/acre	32. Beans, snap		48. Pumpkins/Squash	
08.	Corn, silage	ton/acre	19. Grass Seed Prod.	lb/acre	33. Beets, table		49. Radishes	62. Other _____
09.	Sweet Corn	ton/acre	20. Grass Pasture	-	34. Broccoli		50. Turnips	
			21. Millet	lb/acre	35. Brussels Sprouts		51. Rhubarb	
			22. Native Grasses	tons/acre	36. Cabbage		52. Rutabagas	
			23. Potatoes	cwt/acre	37. Cauliflower		53. Spinach	
					38. Carrots		54. Tomatoes	

**Instructions for Completing this Soil Sample Analysis Request Sheet** - complete information will provide the most accurate recommendations possible.

**1 - Crop History:** Indicate crops grown in the past **two** growing seasons using the Crop Codes from the list at the bottom of the first page. If alfalfa was grown indicate the number of plants (crowns) per sq. ft.

**2 - Proposed Crops:** Request recommendations for up to **three crops or three yield goals for one crop**. At least one option must be completed to receive a fertilizer recommendation. For CRP acres, list the crop most similar to that being seeded (e.g., 04 for legume/grass hay or 22 for native grasses.)

**3 - Test(s) Requested:** Indicate test choices for each sample. **Before selecting nitrate, read the information below for Nitrate Test** to see if it applies to your area or crop.

**Regular Series:** Sample the plow layer for cultivated land or to 3 inches for pastures/sod fields. Includes phosphorus, potassium, pH (lime requirement), percent organic matter, estimated texture.

**Special Tests:** These tests are conducted only on the plow layer depth. Includes zinc, copper, iron, manganese, boron, calcium, magnesium, soluble salts. Copper recommendations apply only for peat or muck soils. Research has shown that for Minnesota soils, tests for iron and manganese are not practical; they are included to accommodate special requests.

**Sulfur Test:** The sulfur test is not a reliable predictor of sulfur needs. Sulfur recommendations are based on crop and soil texture. Contact your county extension educator for details.

**Nutrient Management P:** This test is designed for situations where the soil test level for phosphorus is expected to be in the high range (>50 ppm Olsen) and is required for nutrient management decisions. Range is 20–250 ppm extractable Olsen P.

**Nitrate Test:** For the N recommendation to be based on the nitrate value, **the soil MUST be collected to a depth of 24 inches**. There are two options for a Nitrate Only test: 1) submit two separate samples, a 0-6" depth sample and a 6"-24" depth sample, or; 2) collect the soil from 0-24". The nitrate test applies to non-sandy soils in western Minnesota with an exception noted below. This test is preferred for making N recommendations for the counties west of and including Lake of the Woods, Beltrami, Becker, Otter Tail, Douglas, Pope, Kandiyohi, Renville, Redwood, Cottonwood, and Jackson. In these counties, the nitrate test is used in making N recommendations for corn, small grains, potatoes, and sugar beets.

**For the counties EAST of those noted above,** the nitrate test is used to recommend N only if the sample is collected in the spring before or near planting (April 1 – June 15).

N fertilizer recommendations will not be based on the analysis of only plow layer samples for nitrate-nitrogen. If only a plow layer sample is submitted, N recommendations will be based on cropping history, intended crop, yield goal, and soil organic matter level.

Samples collected for the nitrate test should be frozen or air-dried immediately. Drying can be accomplished by spreading the soil in the sun, or placing near a heat source.

If only nitrate is to be determined, the samples can be dried in a microwave oven using several 2-minute power cycles, stirring between each cycle. Please use an insulated container for shipping frozen samples, as premature thawing can affect nitrate test results.

**Sampling Instructions**

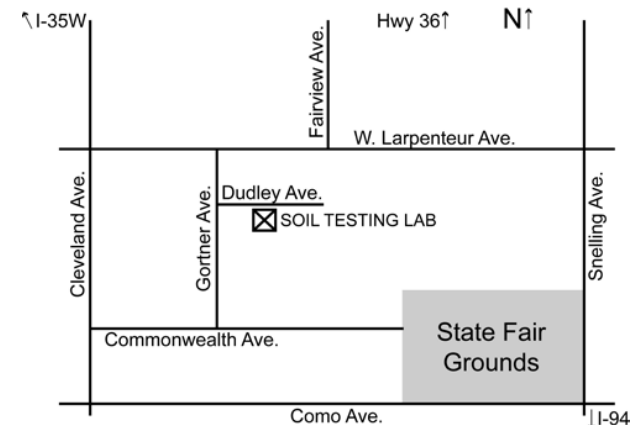
Submit one sample for each area of the field. Each area should have fairly uniform soil color and texture, cropping history, fertilizer, lime, and manure treatments. One sample should not represent more than **20 acres** on level, uniform landscapes, or **5 acres** on hilly or rolling land. Within each area collect 15-30 sub-samples (cores, borings, or spade slices) in a grid pattern. The more variable the soil, the more sub-samples should be combined per area sampled. Mix the sub-samples thoroughly in a clean pail, **fill a bag or other clean container with approximately 2 cups of soil**. If samples must be taken wet, they should be dried before being mixed and submitted to the laboratory. Do not exceed a drying temperature of 97°F, and do not use a microwave oven unless only the nitrate test is requested.

**Sample** by scraping off the surface residue. **Sample to the plow layer (6-8") for cultivated land or 3" for pastures/sod fields**. Sample row crop fields between rows. For ridge-till plantings take the sample on the shoulder of the ridge (avoiding the starter fertilizer band). Avoid sampling dead or back furrows, terraces, old fence rows, lime or fertilizer spill areas, headlands, eroded knolls, low spots, or small saline areas. Sample at least 300 feet away from gravel or crushed limestone roads because their dust changes soil pH.

**Mail or deliver the sample(s), this completed analysis sheet and payment (check made out to the University of Minnesota) to:**

Soil Testing Laboratory - University of Minnesota  
135 Crops Research Building  
1902 Dudley Avenue  
St. Paul, MN 55108

**Laboratory Hours**  
Monday-Friday  
8am-4:30pm



**For additional information visit our website at <https://soiltest.cfans.umn.edu>, call us at (612) 625-3101, or contact your local county extension office.**