

# SOIL ANALYSIS INFORMATION SHEET

**USU ANALYTICAL**



**LABORATORIES**



USU Analytical Labs  
Ag Science Rm 166  
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Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
County: \_\_\_\_\_  
Phone : \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email : \_\_\_\_\_

|                | Sample Numbers |       |       |       |
|----------------|----------------|-------|-------|-------|
|                | 1              | 2     | 3     | 4     |
| Sample I.D.    | _____          | _____ | _____ | _____ |
| Sample Depth   | _____          | _____ | _____ | _____ |
| Tests Desired* | _____          | _____ | _____ | _____ |

| *TESTS DESIRED  | Price/sample |
|---|--------------|
| 1. Routine (pH, salinity, texture, P, K, recommendations) .....                                       | 14.00        |
| 2. Basic (Phosphorus + Potassium only =P+K) .....   | 10.00        |
| 3. Manure application - (Routine + Nitrate-N**) .....   | 24.00        |
| 4. Micro Plus (Routine + micronutrients) .....  | 24.00        |
| 5. Complete (pH, salinity, texture, P, K, Nitrate-N**, micronutrients, sulfate, organic matter) ..... | 50.00        |
| 6. UDOT Required (pH, salinity, SAR, organic matter, particle size, >2mm) .....                       | 50.00        |
| <u>Individual Component Analysis</u>  |              |
| Please contact the lab for individual analyses/additional analyses                                    |              |
| **Nitrate-N analysis requires special sampling/handling. See procedures on reverse side.              |              |

**TESTS REQUIRE 2 CUPS OF SOIL/SAMPLE - FILL BOX COMPLETELY FULL**

COMMENTS or special problems: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total cost of analysis: \$ \_\_\_\_\_

Check # \_\_\_\_\_  Cash  
 Credit Card  
# \_\_\_\_\_ exp \_\_\_\_\_  
 Visa  Master card  Discover

**PLEASE INCLUDE PAYMENT WITH SAMPLE TO PREVENT DELAY ON SAMPLE PROCESSING.**

### LAWN • GARDEN • ORCHARD

| Crops to be Grown | Sample Numbers           |                          |                          |                          |
|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                   | 1                        | 2                        | 3                        | 4                        |
| 1. Garden/flowers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Lawn           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Shrubs/trees   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Fruit trees    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. _____          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### MATERIALS APPLIED DURING PAST YEAR

|                           |                          |                          |                          |                          |
|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1. Manure                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Leaves/ grass/residues | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Commercial fertilizer  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. _____                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### FIELD CROPS

| Crops to be Grown                   | Sample Numbers           |                          |                          |                          |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                     | 1                        | 2                        | 3                        | 4                        |
| <b>IRRIGATED</b>                    |                          |                          |                          |                          |
| 1. Alfalfa 100%                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Grass Hay 100%                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Legume /Grass Hay<br>% Legume    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Grass Pasture                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Legume/Grass Pasture<br>% Legume | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Corn (silage)                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Corn for grain                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Wheat                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Barley/Oats                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Potatoes                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Turf (golf/sports)              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. _____                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### NON-IRRIGATED

|                   |                          |                          |                          |                          |
|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 13. Grain         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Alfalfa       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Grass Pasture | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Reclamation   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. _____         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### YIELD GOAL\*\*

|                           |                                |                          |                          |                          |
|---------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| Acres in field            | _____                          | _____                    | _____                    | _____                    |
| <b>CROP LAST YEAR</b>     | _____                          | _____                    | _____                    | _____                    |
| Yield per acre            | _____                          | _____                    | _____                    | _____                    |
| Was straw/stover removed? | __Yes <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|                           | __No <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### MANURE FOR THIS CROP:

Tons per acre \_\_\_\_\_  
\*\*use realistic goals for your conditions

# SOIL SAMPLING PROCEDURE

Good samples are required to derive useful information from soil tests.

**WHEN:** Any time of the year; early fall is often preferred. Allow two weeks to get results before buying fertilizer. For special nitrate tests, sample in the spring (see instructions below).

**TOOLS:** (a) A clean plastic container for each depth to be sampled. (b) Sampling auger or tube (USU Extension Office) or a shovel will serve for plow-layer samples.

**AREA:** Select an area having uniform color, texture, drainage, and the same cropping and fertilizer treatment last year. Leave out non-typical spots or sample them separately. For each area to be sampled, take separate samples from 8 to 10 locations in a pattern that will represent the entire area.

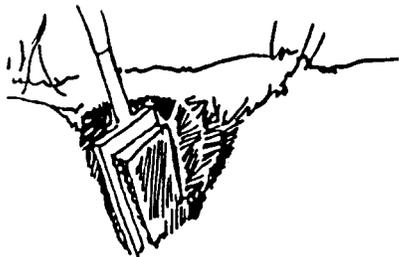
**DEPTH:** (a) Standard topsoil sample: from surface down to 12 inches; (b) Turf samples: surface down to 6 inches (4 inches for golf greens); (c) For special nitrate tests, see instructions below.

**TAKING THE SAMPLE:** Scrape away surface litter. Avoid manure spots. If previous fertilizer was banded, take special care to get a representative sample.

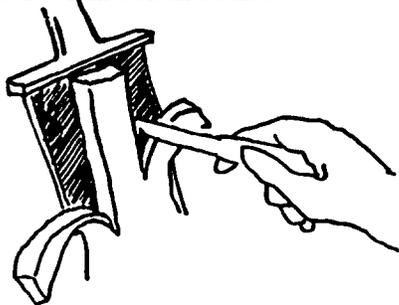
(a) Using a soil tube or auger: follow the instructions given with the tool.

(b) Using shovel:

1. Dig a V-shaped hole to plow depth. Remove a 1-inch slice of soil from one side.



2. Discard the edges of the slice until your sample is about 1 or 2 inches wide. Put it in a clean bucket.

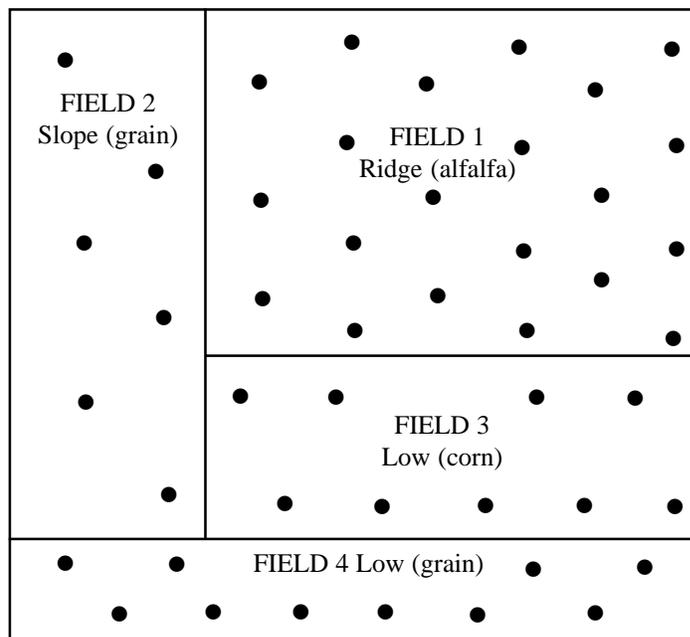


3. Repeat 1 and 2 for other samples for the sampling areas.

**SAMPLE HANDLING:** Combine the samples from the field in a clean container. Mix them well, then **take about 1 pint (to fill the soil box provided)** to send for analysis. Assign it an

identification and record details in your files.

**SHIPPING:** Send samples prepaid by parcel post or express, accompanied by this description form and a check payable to USU Analytical Laboratories, Logan, UT 84322-4830. Retain a copy for your files.



## SPECIAL SAMPLING for nitrate-N or suspected salinity problems:

a. Sample for nitrate-N in the spring.

b. Take samples 0 to 12 inches deep as described above. Put these in one container.

c. Starting at the bottom of the hole in (b), sample the 12 to 24-inch (or 12 to 36-inch) depth. Put these subsoil samples into a separate container. Mix and label the combined subsoil sample as above.

d. Spread samples out on a clean surface and air-dry them before mailing (or deliver them to the lab within 24 hours).