Predictive

Waste Report

Links to Helpful Information

Farm: 52-72

Client: Kent Davenport
Sasser"s Mill Livestock
2959 Wyse Fork Rd
Dover, NC 28526
Jones County

Advisor:

Sampled: 03/13/2021
Received: 03/24/2021
Completed: 03/29/2021

PALS #: 233608

PALS #:

Sample Information

ID: SOW
Code: ALF
Description:
Swine-Farrow to Ween Lagoon
Grower Comments:
Not Provided

Nutrient Measurements are given in units of parts per million (ppm), unless otherwise specified.

Nitrogen (N)	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo
Total N:	50.2	322	46.4	27.7	10.8	0.91	0.09	0.58	0.11	0.72	-
Total Kjeldahl N: 146											
Inorganic:											
NH_4-N											
NO_3-N											

SS (10^{-5} S/cm)	EC (mS/cm)	pH (Unitless)	BD (lb/yd^3)	CCE (%)	ALE (1000 gal)	C:N (Unitless)	DM (%)
-	-	7.00	-	-	-	-	-

Other Results

C	Al	Na	Cl
-	0.31	139	-

Estimate of Nutrients Available for First Year (lb/1000 gal)

Application Method:	N	P_2O_5	K_2O	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo
Irrigation	0.61	0.96	3.22	0.39	0.23	0.09	0.01	0.00	0.01	0.00	0.01	-
Irrigation	0.61	0.96	3.22	0.39	0.23	0.09	0.01	0.00	0.01	0.00	0.01	-

Other Results (lb/1000 gal)

Al	Na	Cl
0.00	1.16	-
0.00	1.16	-

North Carolina Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.
- Steve Troxler, Commissioner of Agriculture.

Sample Information

ID: GILT
Code: ALS
Description: Swine Lagoon Liq.
Grower Comments: Not Provided

Nutrient Measurements are given in units of parts per million (ppm), unless otherwise specified.

Nitrogen (N)	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo
Total N:	46.2	257	28.1	21.1	11.2	0.46	0.03	0.14	0.05	0.61	-
Total Kjeldahl N: 11.8											
Inorganic:											
NH_4-N											
NO_3-N											

SS (10^{-5} S/cm)	EC (mS/cm)	pH (Unitless)	BD (lb/yd³)	CCE (%)	ALE (1000 gal)	C:N (Unitless)	DM (%)
-	-	7.20	-	-	-	-	-

Other Results

C	Al	Na	Cl
-	0.29	115	-

Estimate of Nutrients Available for First Year (lb/1000 gal)

Application Method:	N	P_2O_5	K_2O	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo
Irrigation	0.05	0.88	2.57	0.24	0.18	0.09	0.00	0.00	0.00	0.00	0.01	-
Irrigation	0.05	0.88	2.57	0.24	0.18	0.09	0.00	0.00	0.00	0.00	0.01	-

Other Results (lb/1000 gal)

Application Method:	Al	Na	Cl
Irrigation	0.00	0.96	-
Irrigation	0.00	0.96	-

Agronomist's Comments: Values of nitrogen below 20 ppm are below the detection limit for the method that NCDA&CS uses.

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY21-SL028195

Predictive

Soil Report

Mehlich-3 Extraction

Links to Helpful Information

Client: Kent Davenport
Sasser"s Mill Livestock
2959 Wyse Fork Rd
Dover, NC 28526

Sampled County : Jones

Client ID: 233608

Advisor: Shane Sykes
Nutrien Ag Solutions
372 Hwy 58 South
Trenton, NC 28585

Advisor ID: 403805

Sampled: 03/23/2021 **Received:** 03/30/2021 **Completed:** 04/08/2021 **Farm:**

Sample ID: SHP1

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	0.5	80-100	0	60	0	0	0	0	0	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.60	1.28	4.2	73	1.2	5.6	178	49	52	15	39	57	44		69	69	53	0.1	2		

Sample ID: SHP2

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	1.3	80-100	0	130	0	0	0	0	0	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
2.22	1.30	5.7	60	2.2	5.2	76	28	44	14	42	27	26		63	63	39	0.1	2		

Sample ID: SHP3

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	0.5	80-100	0	130	0	0	0	0	0	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
1.02	1.28	4.8	72	1.4	5.7	198	30	54	15	45	32	29		44	44	34	0.1	2		

North Carolina Tobacco Trust Fund Commission

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.

- *Steve Troxler, Commissioner of Agriculture*

Sample ID: SHP7	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
Lime History:	1 - SG/Soybean (DC)	0.3	80-100	0	120	0	0	0	0	0	0	Note: 3
	2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: Soil Class: Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.27	1.26	3.3	69	1.0	5.8	163	32	45	18	38	43	36		50	50	45	0.1	3		

Sample ID: SHP8	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
Lime History:	1 - Corn, grain	0.0	120 - 160	0	30	0	0	0	0	2	0	Note: 3
	2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: Soil Class: Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.32	1.23	4.5	80	0.9	6.0	184	60	51	23	37	58	52		53	53	23	0.1	2		

Sample ID: SHP12	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
Lime History:	1 - Corn, grain	0.6	120 - 160	0	70	0	0	0	0	0	0	Note: 3
	2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: Soil Class: Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.60	1.31	4.2	67	1.4	5.6	318	36	48	15	38	68	58		77	77	38	0.1	2		

Sample ID: SHP1G	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
Lime History:	1 - SG/Soybean (DC)	0.5	80-100	0	0	0	0	0	0	0	0	Note: 3
	2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: Soil Class: Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.51	1.22	4.1	71	1.2	5.5	210	91	45	15	48	89	63		76	76	43	0.2	5		

Sample ID: SHP1B

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	0.7	80-100	0	80	0	0	0	0	0	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO_3-N in mg/dm³]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.51	1.27	3.9	65	1.4	5.4	189	44	45	13	45	48	39		58	58	40	0.1	3		

Sample ID: SHP3G

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	0.5	80-100	0	0	0	0	0	0	2	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO_3-N in mg/dm³]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.27	1.28	3.7	72	1.0	5.5	158	83	44	17	40	50	40		41	41	22	0.2	5		

Sample ID: SHP3B

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - SG/Soybean (DC)	0.5	80-100	0	80	0	0	0	0	0	0	Note: 3
2 -	0.0										

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO_3-N in mg/dm³]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.92	1.27	4.5	71	1.3	5.6	157	43	49	17	44	28	27		39	39	31	0.1	2		

Sample ID: SAS1

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Bermuda hay/past., M	0.0	180-220	0	110	0	0	pH$	0	0	0	Note: 12 Note: $
2 -	0.0										

Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO_3-N in mg/dm³]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.60	1.19	7.7	94	0.5	6.7	378	52	68	22	33	160	103		102	102	33	0.1	1		

Sample ID: SAS2

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Bermuda hay/past., M	0.0	180-220	0	70	0	0	pH$	0	0	0	Note: 12 Note: $
2 -	0.0										

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.66	1.23	6.3	92	0.5	6.7	274	69	63	24	36	157	100		112	112	34	0.2	3		

Understanding the Soil Report: explanation of measurements, abbreviations and units

Recommendations

Lime

If testing finds that soil pH is too low for the crop(s) indicated, a ***lime recommendation*** will be given in units of either ton/acre or lb/1000 sq ft. For best results, mix the lime into the top 6 to 8 inches of soil several months before planting. For no-till or established plantings where this is not possible, apply no more than 1 to 1.5 ton/acre (50 lb/1000 sq ft) at one time, even if the report recommends more. You can apply the rest in similar increments every six months until the full rate is applied. If MG is recommended and lime is needed, use dolomitric lime.

Fertilizer

Recommendations ***for field crops or other large areas*** are listed separately for each nutrient to be added (in units of lb/acre unless otherwise specified). Recommendations for N (and sometimes for B) are based on research/field studies for the crop being grown, not on soil test results. K-I and P-I values are based on test results and should be > 50. If they are not, follow the fertilizer recommendations given. If Mg is needed and no lime is recommended, 0-0-22 (11.5% Mg) is an excellent source; 175 to 250 lb per acre alone or in a fertilizer blend will usually satisfy crop needs, SS-I levels appear only on reports for greenhouse soil or problem samples.

Farmers and other commercial producers should pay special attention to ***micronutrient levels***. If *$, pH$, $pH, C* or *Z* notations appear on the soil report, refer to *$Note: Secondary Nutrients and Micronutrients*. In general, homeowners do not need to be concerned about micronutrients. Various crop notes also address lime fertilizer needs; visit ncagr.gov/agronomi/pubs.htm.

Recommendations ***for small areas, such as home lawns/gardens,*** are listed in units of lb/1000 sq ft . If you cannot find the exact fertilizer grade recommended on the report, visit *www.ncagr.gov/agronomi/obpart4.htm#fs* to find information that may help you choose a comparable alternate. For more information, read *A Homeowner's Guide to Fertilizer*.

Test Results

The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility measurement. Visit *www.ncagr.gov/agronomi/uyrst.htm*

Report Abbreviations

Ac	exchangeable acidity
B	boron
BS%	% CEC occupied by basic cations
Ca%	% CEC occupied by calcium
CEC	cation exchange capacity
Cu-I	copper index
ESP	exchangeable sodium percent
HM%	percent humic matter
K-I	potassium index
K_2O	potash
Mg%	% CEC occupied by magnesium
MIN	mineral soil class
Mn	manganese
Mn-AI1	Mn-availability index for crop 1
Mn-AI2	Mn-availability index for crop 2
Mn-I	manganese index
M-O	mineral-organic soil class
N	nitrogen
Na	sodium
NO_3-N	nitrate nitrogen
ORG	organic soil class
pH	current soil pH
P-I	phosphorus index
P_2O_5	phosphate
S-I	sulfur index
SS-I	soluble salt index
W/V	weight per volume
Zn-AI	zinc availability index
Zn-I	zinc index