PUNGO RIVER LIME COMPANY

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SOLID WASTE SECTION

2012

WEYERHAEUSER LIME BY-PRODUCT APPLICATION SUMMARY

Prepared by: Mark E. Elliott
(252) 974-1182

Total Agronomic Services

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SECTION #1

2012 WEYERHAEUSER LIME BY-PRODUCT APPLICATION SUMMARY

These lime by-product applications were based on the information supplied to Total Agronomic Services by Pungo River Lime and Dawson Pugh Farms. Pungo River Lime applied the Weyerhaeuser lime by-product on 1,174 acres of Dawson Pugh Farms, Hyde County, North Carolina, using broadcast spreader trucks. The lime by-product applied from June 2011 to June 2012 totaled 963 tons, primarily used as a liming agent. The soil lime and fertility needs were determined from soil tests conducted by the North Carolina Department of Agriculture. Cotton and Corn were grown on these farms for the 2012 season.

Waste Analysis Reports were conducted by NCDA on the Lime by-product that Pungo River Lime had on site. The Waste Analysis results reported the Lime by-product to have a good Agricultural Lime Equivalence, 1.5 tons of by-products to equal 1.0 ton of Ag Lime. Using the Soil Sample Reports and Waste Analysis Reports, recommendations were made using the geo-referenced application rate of lime by-product on a farm by farm basis.

Pungo River Lime Co., Inc. stockpiled and applied the lime mud material in accordance with agronomic need and best management practices. Lime mud was only applied at light to no winds, at least 100 feet from residences. Materials were spread in a timely manner with stockpiles located away from water ways and properly buffered.

Total Agronomic Services

2012 WEYERHAEUSER LIME BY-PRODUCT APPLICATION
Prepared by Total Agronomic Services

DAWSON PUGH FARMS
Hyde County, NC

APPLICATION DATE	FARM NAME	TOTAL ACRES	TOTAL TONS APPLIED	AVERAGE TONS APPLIED/ACRE
Jan-12	RONROY	58	48.4	0.8
Jan-12	AMITY	184	143.0	0.8
Jan-12	MARTELLES	55	82.9	1.5
Jan-12	NORWOODS	52	79.2	1.5
Jan-12	MIDDLETOWN	288	189.7	0.7
Jan-12	GOSHEN	108	174.2	1.6
Jan-12	JOLLY	113	61.5	0.5
Jan-12	NEW ROAD	22	25.1	1.1
Jan-12	PAYNE	106	12.6	0.1
Jan-12	J. MILLER	61	45.4	0.7
Jan-12	DUDLEY 264	83	57.3	0.7
Jan-12	BEARD 264	44	43.7	1.0
	TOTAL	**1174**	**963.0**	

Total Agronomic Services
TAS
FARM CONSULTANTS
252-974-1182

SECTION #2

NCDA&CS Agronomic Division Phone: (919)733-2655 Web site: www.ncagr.gov/agronomi/ **Report: W05485**

Waste Analysis Report

Grower: **Armstrong, Darren**
PO Box 134
Belhaven, NC 27810

Copies to: Total Agronomic Services Inc

Farm: WHITE LIME

Hyde County

Received: 02/07/2011 Completed: 02/15/2011 Links to Helpful Information

Sample Information

Sample ID: 1210A

Waste Code: FCW

Description: Composted Waste - Other

Laboratory Results (parts per million unless otherwise noted)

	N	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo	Cl	C
Total	0.00	3773	441	302527	7118	407	207	295	12.8	4.47	5.58			111744
IN-N														
-NH4														
-NO3														
OR-N														
Urea														

Na	Ni	Cd	Pb	Al	Se	Li	pH	SS	C:N	DM%	CCE%	ALE(tons)
6729							11.62	281		64.30	93.75	1.50

Recommendations:

Application Method Broadcast

Nutrients Available for First Crop — lbs/ton (wet basis)

N	P2O5	K2O	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo	Cl
T	6.7	0.54	233.4	5.5	0.31	0.16	0.23	0.01	T	T		

Other Elements — lbs/ton (wet basis)

Na	Ni	Cd	Pb	Al	Se	Li
8.7						

Completed: 2/8/2011

Sample Information

Sample ID: 1210B

Waste Code: FCW

Description: Composted Waste - Other

Laboratory Results (parts per million unless otherwise noted)

	N	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo	Cl	C
Total	0.00	3832	316	301653	7112	311	178	292	11.4	2.38	5.84			111789
IN-N														
-NH4														
-NO3														
OR-N														
Urea														

Na	Ni	Cd	Pb	Al	Se	Li	pH	SS	C:N	DM%	CCE%	ALE(tons)
6301							11.5	283		63.88	96.25	1.50

Recommendations:

Application Method Broadcast

Nutrients Available for First Crop — lbs/ton (wet basis)

N	P2O5	K2O	Ca	Mg	S	Fe	Mn	Zn	Cu	B	Mo	Cl
T	6.7	0.39	231.2	5.5	0.24	0.14	0.22	0.01	T	T		

Other Elements — lbs/ton (wet basis)

Na	Ni	Cd	Pb	Al	Se	Li
8.1						

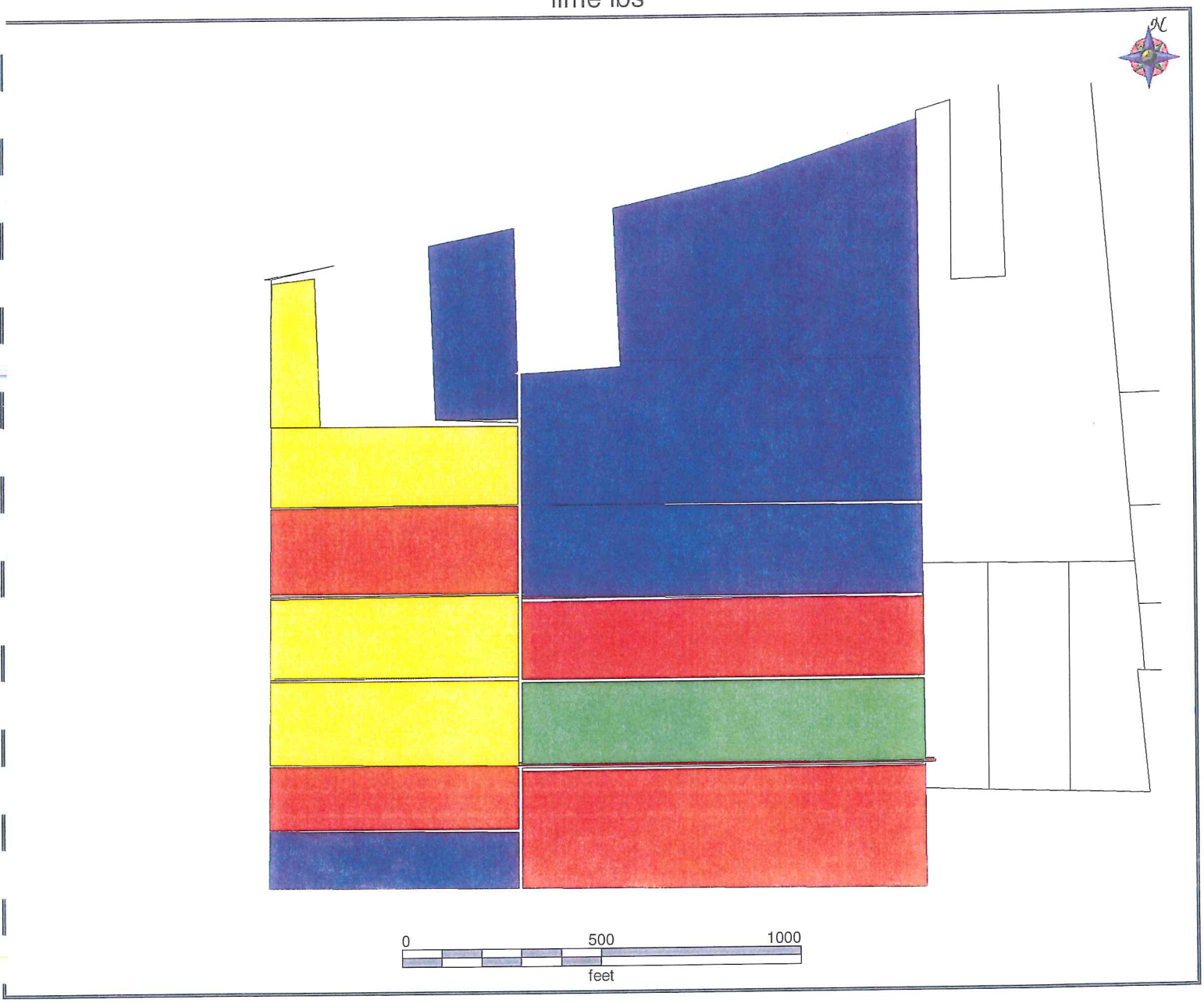
North Carolina Tobacco Trust Fund Commission

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

SECTION #3

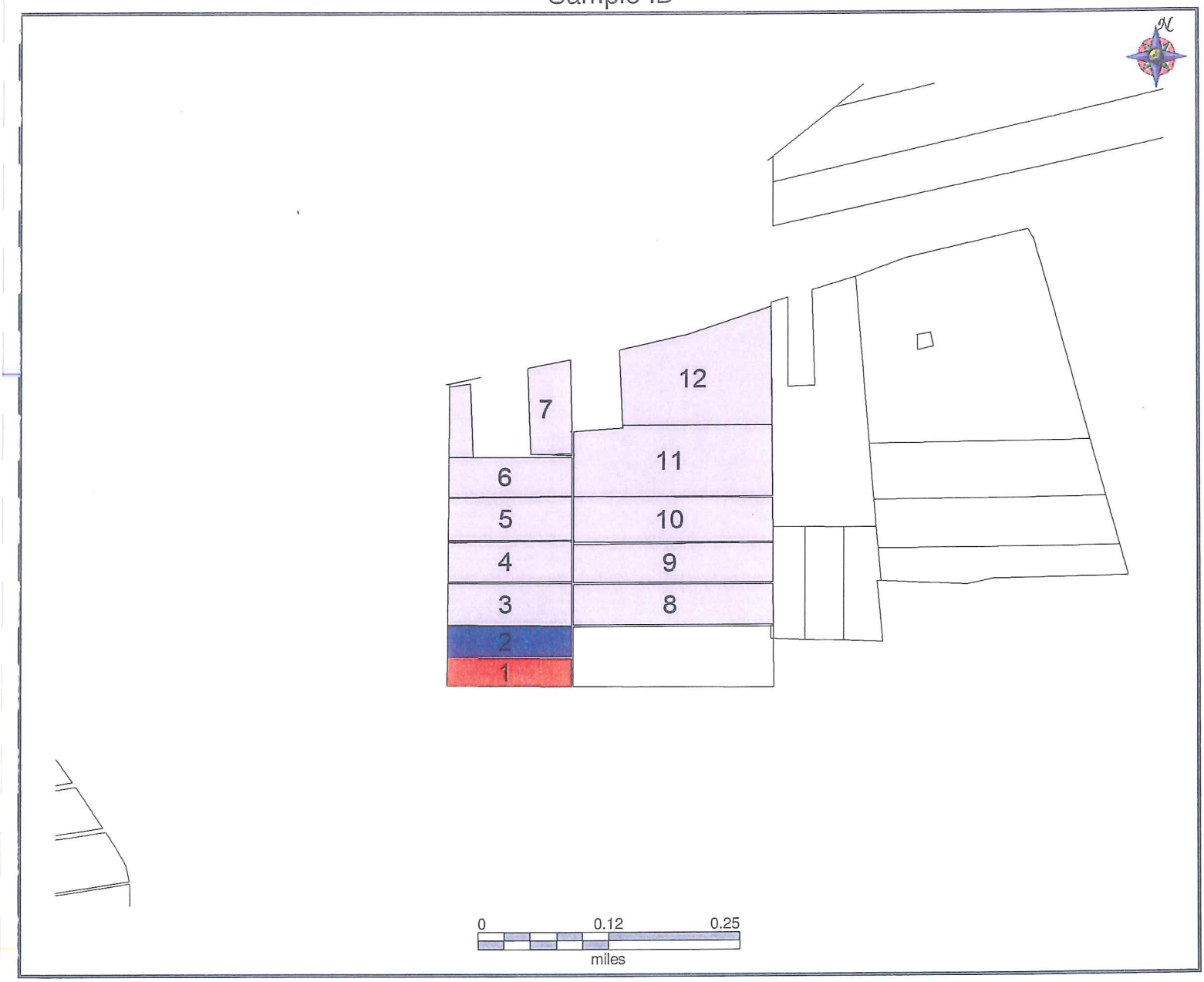
Ron/Roy - 2012 Cotton: Application
lime lbs



Client: Pugh, Dawson
Farm: Ron/Roy
Field: Ron/Roy
Crop: 2012 Cotton
Name: Ron/Roy - Application
Type: Application
Date: 2/29/2012
lime lbs: 48.437 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 1200.00 lbs/ac
- 0.00 lbs/ac

Ron/Roy
Sample ID



Client: Pugh, Dawson
Farm: Ron/Roy
Field: Ron/Roy
Name: zone layer
Min: 1
Max: 12
Avg: 6

2
1

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL014679

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: RON ROY

Links to Helpful Information

Sampled: | Received: 11/10/2011 | Completed: 11/28/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.85	0.83	8.1	60	3.2	5.0	55	80	47	9	110	40	49	56	38	63	57				

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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: Organic

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
5.85	0.80	7.3	53	3.4	4.9	47	65	42	7	112	34	47	54	22	37	54				

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.69	0.83	7.4	51	3.6	4.8	55	70	39	7	138	41	50	57	29	48	57				

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
6.02	0.82	8.3	53	3.9	4.8	52	71	41	9	194	54	58	65	33	55	61				

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.85	0.85	9.4	57	4.0	5.0	50	76	46	8	146	48	54	61	34	56	64				

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Organic

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
4.95	0.97	8.0	66	2.7	5.3	105	62	55	7	88	48	46	53	47	59	82				

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

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
3.67	1.05	6.8	71	2.0	5.7	190	77	58	8	58	119	86	93	70	88	84				

Dawson Pugh

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.69	0.79	9.4	67	3.1	5.4	62	85	50	13	135	41	44	51	47	78	72				

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.85	0.80	8.6	59	3.5	5.1	62	78	44	11	140	50	54	61	46	76	81				

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
6.38	0.81	7.5	55	3.4	4.9	70	72	39	10	142	54	59	66	50	83	79				

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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: Organic

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
6.78	0.89	8.4	56	3.7	5.2	71	63	41	11	96	38	45	52	60	100	79				

Dawson Pugh

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
5.09	1.04	7.1	66	2.4	5.5	185	73	48	12	58	74	62	69	100	125	138				

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 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

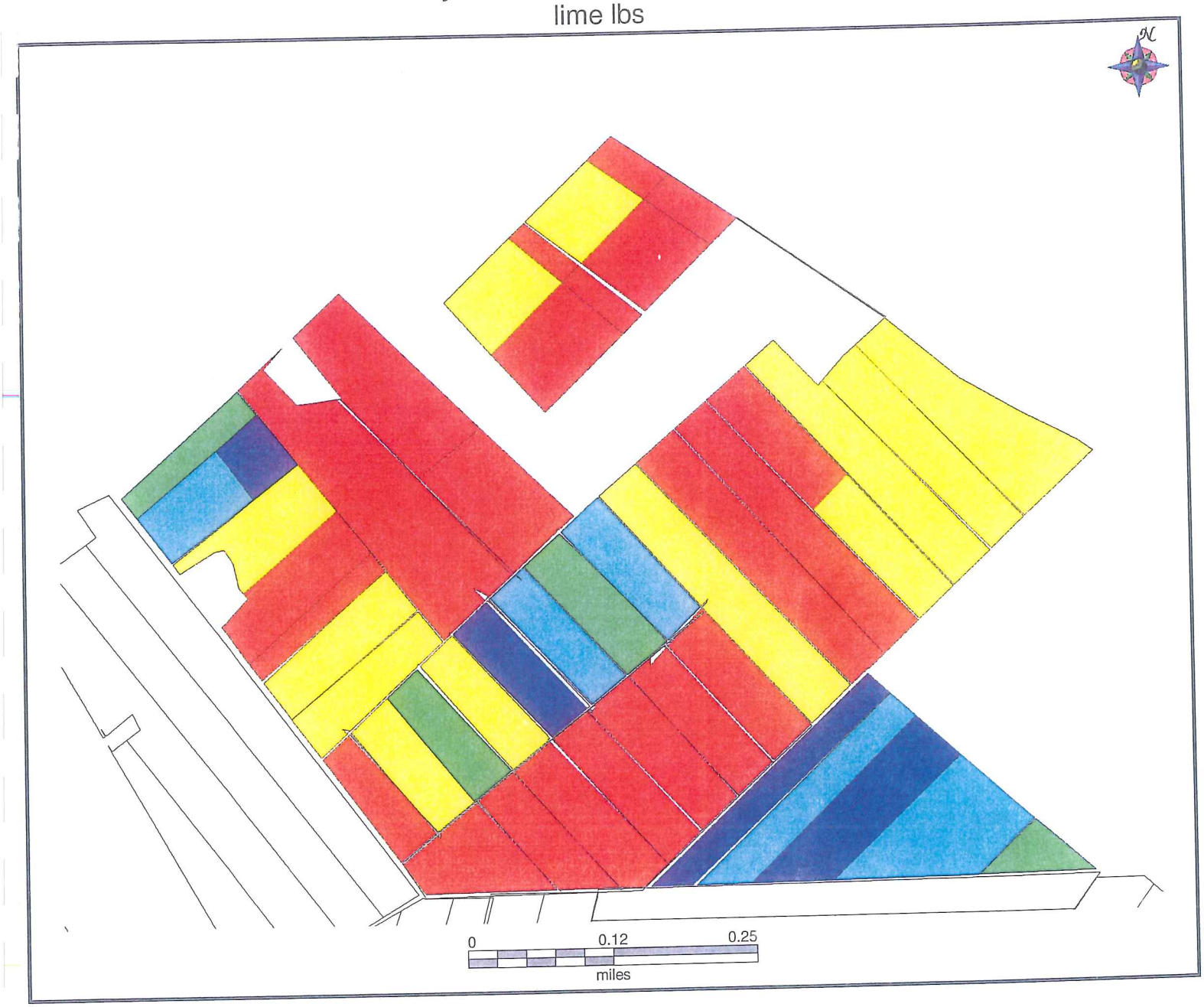
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Amity - 2012 Cotton: Application

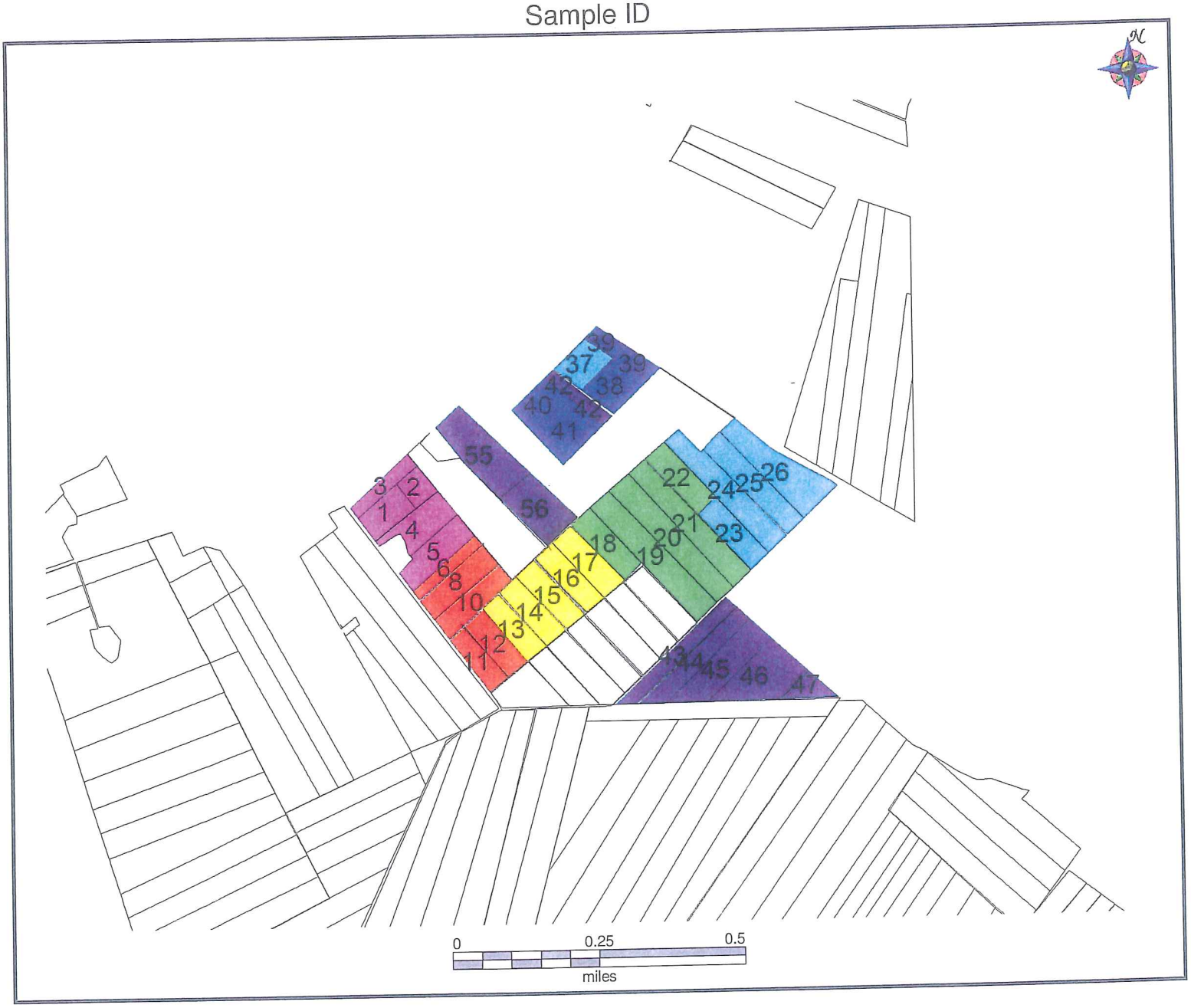
lime lbs



Client: Pugh, Dawson
Farm: Amity
Field: Amity
Crop: 2012 Cotton
Name: Amity - Application
Type: Application
Date: 2/29/2012
lime lbs: 143.011 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 6000.00 lbs/ac
- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Amity
Sample ID



Client: Pugh, Dawson
Farm: Amity
Field: Amity
Name: zone map
Min: 1
Max: 56
Avg: 25

- 42 - 56
- 38 - 41
- 23 - 37
- 18 - 22
- 13 - 17
- 6 - 12
- 1 - 5

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY12-SL014678

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: AMITY CAMILLE

Links to Helpful Information

Sampled: Received: 11/10/2011 Completed: 11/28/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
3.37	0.99	7.9	70	2.4	5.6	100	76	56	9	65	62	44	51	105	105	90				

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.9	50-70	0	10-30	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	$		0	0	0	0	Note: 3 Note: $

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
3.37	0.97	5.8	53	2.7	5.3	129	72	40	7	73	69	48	55	140	140	92				

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
1.61	0.97	5.7	72	1.6	5.7	114	54	57	9	68	50	37	44	134	134	78				

North Carolina Tobacco Trust Fund Commission

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

Sample ID: 4

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 - Cotton	0.5	50-70	0	10-30	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	$		0	0	0	0	Note: 3 Note: $

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-Organic

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
4.69	0.89	6.3	51	3.1	5.3	184	70	39	6	73	112	85	92	150	188	93				

Sample ID: 5

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 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
6.58	0.80	8.5	65	3.0	5.5	82	83	52	8	67	59	53	60	113	188	73				

Sample ID: 6

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 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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: Organic

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
6.58	0.79	7.5	61	2.9	5.1	74	116	46	8	69	48	52	59	62	103	63				

Sample ID: 7

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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: Organic

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
5.38	0.83	8.8	64	3.2	5.3	69	71	52	8	66	37	43	50	53	88	65				

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

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
4.81	0.90	8.7	69	2.7	5.3	85	78	55	10	66	46	45	52	71	89	73				

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

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
5.09	0.91	8.8	68	2.8	5.3	73	81	54	10	65	38	40	47	102	128	70				

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Organic

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
4.81	0.96	9.1	67	3.0	5.3	89	101	53	9	64	54	50	57	101	126	86				

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	30-50	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	0-20	0		0	0	0	0	Note: 3

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-Organic

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
4.81	0.91	12.5	78	2.8	5.6	42	84	62	13	115	36	38	45	85	106	80				

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	30-50	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	0-20	0		0	0	0	0	Note: 3

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-Organic

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
4.32	0.90	9.2	66	3.1	5.4	44	83	50	12	108	48	46	53	80	100	66				

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	20-40	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	0-20	0		0	0	0	0	Note: 3

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-Organic

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
4.20	0.87	8.0	58	3.4	5.1	49	76	45	8	112	51	48	55	48	60	60				

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	10-30	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	0	0		0	0	0	0	Note: 3

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-Organic

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
3.57	0.93	8.1	70	2.4	5.3	55	99	53	11	104	53	49	56	49	61	69				

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	2.1	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
3.28	0.94	8.5	65	3.0	5.2	74	74	46	14	91	52	38	45	55	55	67				

Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.7	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
3.10	0.95	9.1	71	2.6	5.5	77	73	52	16	89	49	36	43	78	78	63				

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.76	1.00	11.0	82	2.0	5.8	78	70	62	16	59	42	32	39	86	86	69				

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.3	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.44	1.04	10.0	77	2.3	5.7	95	80	59	14	64	52	38	45	54	54	64				

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.87	1.07	10.4	85	1.6	6.0	115	78	63	17	59	83	57	64	57	57	72				

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Sample ID: 20

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.37	1.02	8.6	86	1.2	6.2	124	56	69	14	49	74	51	58	97	97	68				

Sample ID: 21

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.31	1.04	8.9	84	1.4	6.2	157	66	68	12	48	114	75	82	79	79	88				

Sample ID: 22

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.43	1.01	8.6	87	1.1	6.3	132	63	68	15	53	147	94	101	121	121	71				

Sample ID: 23

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.14	1.03	8.1	83	1.4	6.1	115	54	64	15	49	77	53	60	131	131	58				

Sample ID: 24

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.67	1.02	9.3	84	1.5	6.1	152	64	67	14	51	88	60	67	123	123	66				

Sample ID: 25

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.43	1.02	7.4	82	1.3	6.1	174	66	66	13	47	95	64	71	64	64	80				

Sample ID: 26

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.61	0.99	8.9	84	1.4	6.1	190	62	67	13	52	79	54	61	129	129	203				

Sample ID: 27

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
2.01	0.92	9.0	83	1.5	5.9	146	69	66	13	61	102	68	75	61	61	86				

Dawson Pugh

Sample ID: 28

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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	0.92	8.5	84	1.4	6.1	115	75	66	14	60	77	53	60	38	38	74				

Sample ID: 29

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.80	0.99	8.3	86	1.2	6.3	96	63	68	14	57	110	71	78	32	32	64				

Sample ID: 30

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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
2.44	0.97	7.9	71	2.3	5.6	103	56	57	11	65	56	41	48	26	26	72				

Sample ID: 31

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.7	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
2.60	0.99	7.8	67	2.6	5.4	159	64	52	10	70	64	45	52	31	31	74				

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Sample ID: 32

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 - Cotton	1.5	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.68	0.98	8.9	73	2.4	5.5	124	74	55	14	79	36	29	36	60	60	87				

Sample ID: 33

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 - Cotton	1.2	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
2.60	0.96	9.4	77	2.2	5.7	115	68	57	16	87	38	30	37	36	36	76				

Sample ID: 34

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 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

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
3.67	0.97	9.7	73	2.6	5.6	110	77	53	16	78	33	36	43	49	61	87				

Sample ID: 35

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 - Cotton	0.3	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.87	0.98	11.4	88	1.4	6.1	174	100	62	22	96	117	77	84	71	71	92				

Sample ID: 36

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.52	0.98	11.3	83	1.9	5.8	170	133	57	20	108	71	50	57	44	44	105				

Sample ID: 37

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	20-40	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	10-30	$		0	0	0	0	Note: 3 Note: $

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

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
3.98	0.98	5.4	46	2.9	5.2	222	66	33	7	77	35	39	46	140	175	78				

Sample ID: 38

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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

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
6.20	0.87	10.1	73	2.7	5.6	213	94	62	6	65	62	53	60	253	420	113				

Sample ID: 39

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	10-30	$		0	0	0	0	Note: 3 Note: $

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

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
5.69	0.85	5.8	43	3.3	5.1	168	67	33	5	67	42	49	56	105	174	78				

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Sample ID: 40

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	30-50	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	20-40	$		0	0	0	0	Note: 3 Note: $

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-Organic

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
5.23	0.88	6.1	54	2.8	5.3	154	55	43	6	74	63	55	62	168	210	92				

Sample ID: 41

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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: Organic

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
6.78	0.88	8.7	70	2.6	5.6	127	65	60	7	64	49	45	52	174	289	74				

Sample ID: 42

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	20-40	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	10-30	$		0	0	0	0	Note: 3 Note: $

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: Organic

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
5.85	0.91	6.5	54	3.0	5.3	155	62	44	5	72	59	56	63	139	231	76				

Sample ID: 43

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	2.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.68	0.89	8.4	67	2.8	5.2	93	77	44	17	116	43	33	40	77	77	65				

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Sample ID: 44

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 - Cotton	1.6	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.15	0.93	8.2	70	2.5	5.5	91	71	46	19	115	38	30	37	58	58	59				

Sample ID: 45

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 - Cotton	1.8	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.37	0.91	7.7	66	2.6	5.3	109	70	43	19	139	41	32	39	62	62	53				

Sample ID: 46

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 - Cotton	1.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.76	0.94	7.2	68	2.3	5.6	98	70	43	20	122	43	33	40	59	59	48				

Sample ID: 47

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 - Cotton	1.1	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
3.01	0.89	6.5	71	1.9	5.6	96	72	45	21	135	44	33	40	81	81	44				

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Sample ID: 55

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Organic

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
3.47	0.99	6.5	68	2.1	5.6	127	73	51	11	69	69	57	64	209	261	53				

Sample ID: 56

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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:** Organic

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
7.21	0.96	8.3	59	3.4	5.2	58	69	47	9	67	49	52	59	153	254	46				

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 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.*

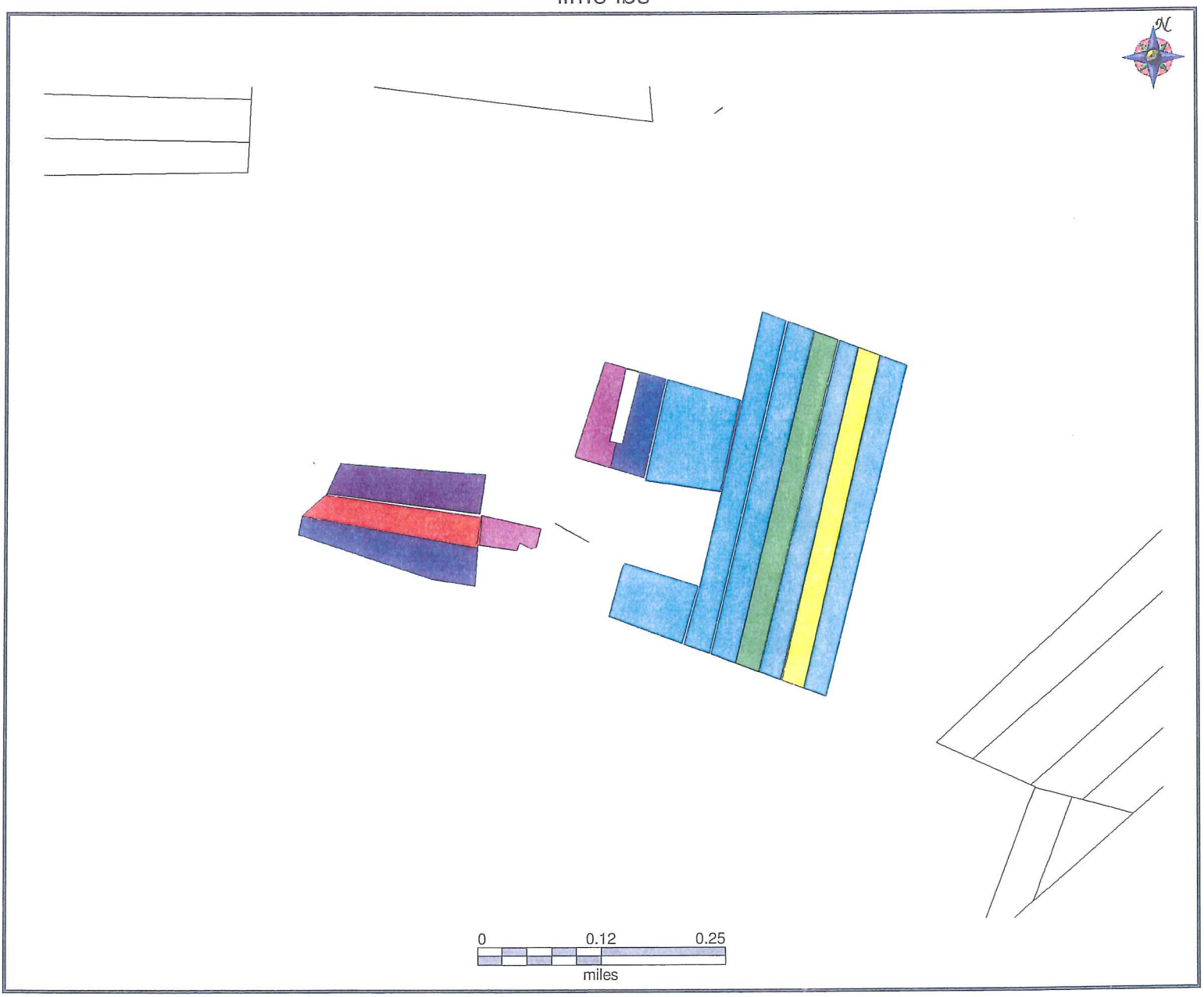
Test Results

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* for more information.

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

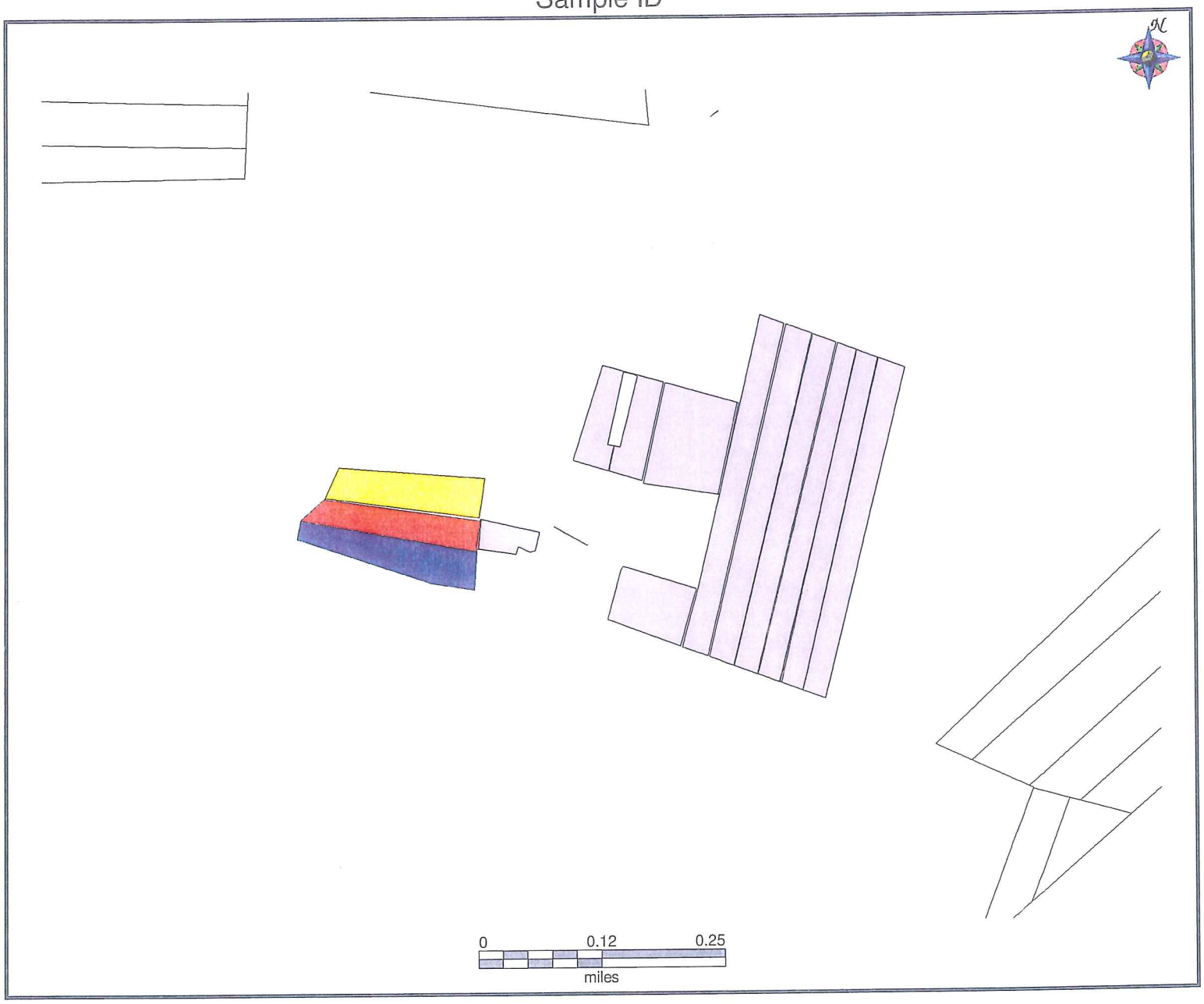
Martelle's - 2012 Cotton: Application
lime lbs



Client: Pugh, Dawson
Farm: Martelle's
Field: Martelle's
Crop: 2012 Cotton
Name: Martelle's - Application
Type: Application
Date: 2/29/2012
lime lbs: 82.809 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 5100.00 lbs/ac
- 4200.00 lbs/ac
- 3300.00 lbs/ac
- 2400.00 lbs/ac
- 2100.00 lbs/ac
- 900.00 lbs/ac
- 0.00 lbs/ac

Martelle's
Sample ID



Client: Pugh, Dawson
Farm: Martelle's
Field: Martelle's
Name: zone map
Min: 1
Max: 20
Avg: 9

20
3
2

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL013327

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: MARTELLES

Links to Helpful Information

Sampled: | Received: 11/02/2011 | Completed: 11/14/2011

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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-Organic

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
3.98	0.97	6.9	55	3.1	5.4	72	61	43	8	60	38	40	47	76	95	56	0.2			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.7	50-70	0-20	30-50	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	30-50	0		0	0	0	0	Note: 3

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
3.37	0.98	7.0	60	2.8	5.6	62	54	48	9	56	23	21	28	81	81	39	0.2			

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	20-40	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	20-40	0		0	0	0	0	Note: 3

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-Organic

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
4.56	0.99	9.8	70	2.9	5.7	50	61	60	7	46	49	44	51	131	164	88	0.2			

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: 5

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 - Cotton	1.4	50-70	0	70-90	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	60-80	0		0	0	0	0	Note: 3

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
2.44	1.06	6.4	63	2.4	5.6	83	32	51	9	61	48	36	43	87	87	61	0.2			

Sample ID: 6

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 - Cotton	1.1	50-70	0	70-90	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	60-80	0		0	0	0	0	Note: 3

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
0.92	1.06	6.1	69	1.9	5.6	115	34	56	11	58	47	35	42	69	69	101	0.2			

Sample ID: 7

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 - Cotton	1.1	50-70	0	60-80	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	50-70	0		0	0	0	0	Note: 3

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
1.67	1.08	6.3	68	2.0	5.7	119	40	54	11	57	61	44	51	45	45	65	0.2			

Sample ID: 8

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 - Cotton	1.1	50-70	0-20	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	40-60	0		0	0	0	0	Note: 3

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
1.94	1.10	9.6	78	2.1	5.8	63	42	62	14	50	62	44	51	107	107	72	0.2			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	20-40	60-80	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	50-70	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.15	1.08	10.2	79	2.1	5.8	46	37	64	13	38	70	49	56	72	72	58	0.2			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.14	1.09	10.0	81	1.9	5.9	71	47	66	13	44	73	51	58	81	81	52	0.3			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	10-30	70-90	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	60-80	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.14	1.08	9.3	81	1.8	5.9	52	32	66	12	41	67	47	54	64	64	53	0.2			

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	10-30	60-80	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	50-70	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.97	1.07	7.9	77	1.8	5.6	52	39	62	13	46	61	44	51	67	67	42	0.2			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	30-50	70-90	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	60-80	0		0	0	0	0	Note: 3

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
1.74	1.07	9.4	79	2.0	5.7	44	36	65	12	37	64	45	52	53	53	51	0.2			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0-20	60-80	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	50-70	0		0	0	0	0	Note: 3

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
0.86	1.11	7.5	80	1.5	5.9	56	41	63	14	39	71	50	57	32	32	45	0.2			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.7	50-70	0	60-80	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	50-70	0		0	$	0	0	Note: 3 Note: $

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
1.08	1.09	8.1	80	1.6	5.9	76	37	63	15	48	81	56	63	24	24	75	0.2			

Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.97	1.06	7.5	77	1.7	5.7	76	51	59	15	46	70	49	56	30	30	68	0.2			

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	1.1	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.37	1.09	7.5	73	2.0	5.7	100	43	57	14	57	68	48	55	31	31	81	0.3			

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	1.3	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.67	1.06	9.4	76	2.3	5.7	112	43	58	15	54	86	59	66	28	28	107	0.3			

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	1.1	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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	1.09	6.9	74	1.8	5.6	70	43	55	16	51	65	46	53	34	34	67	0.2			

Sample ID: 20

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	1.4	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
3.37	1.02	7.4	65	2.6	5.7	87	44	51	11	58	36	29	36	91	91	57	0.2			

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 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

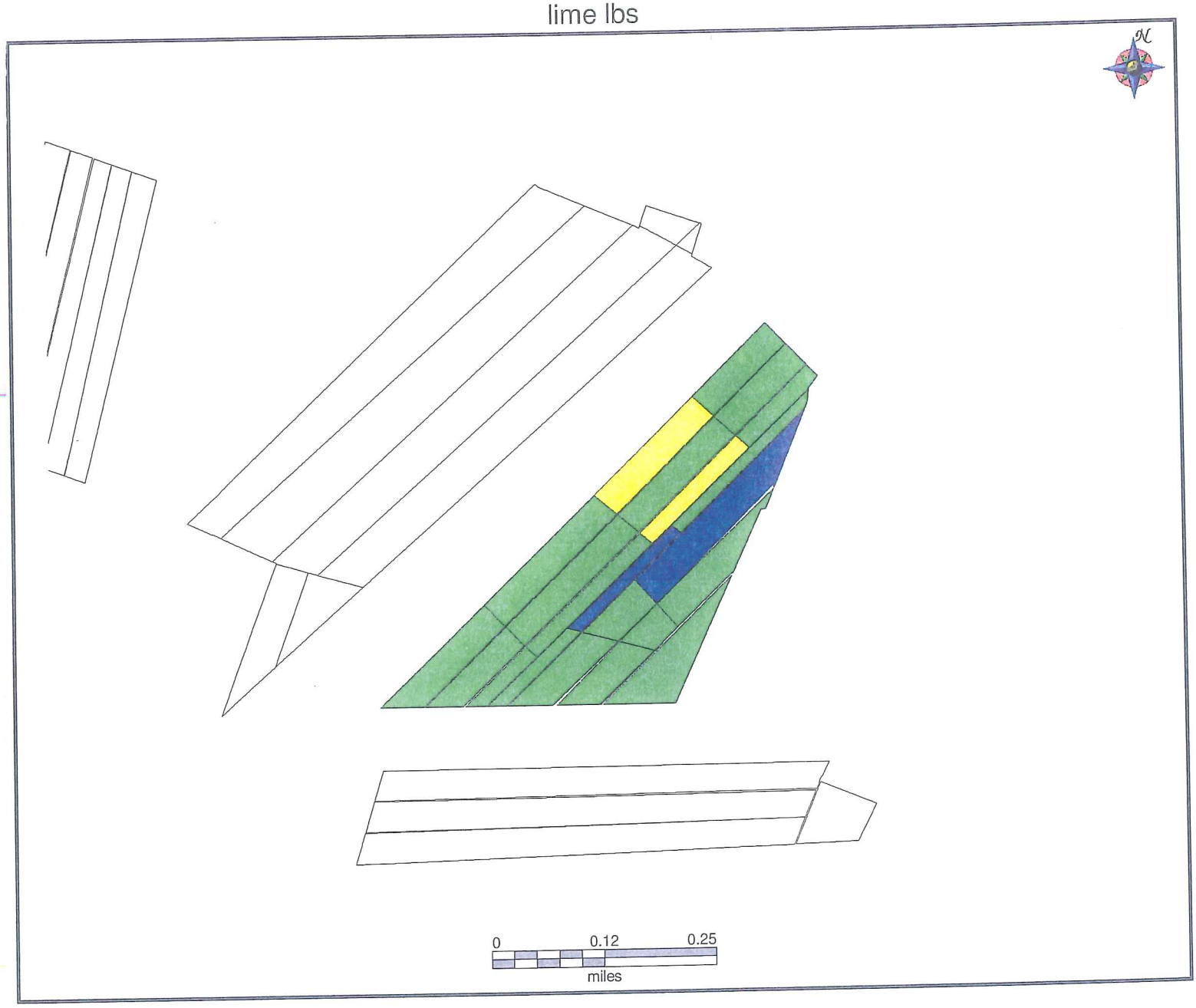
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Norwood - 2012 Cotton: Application

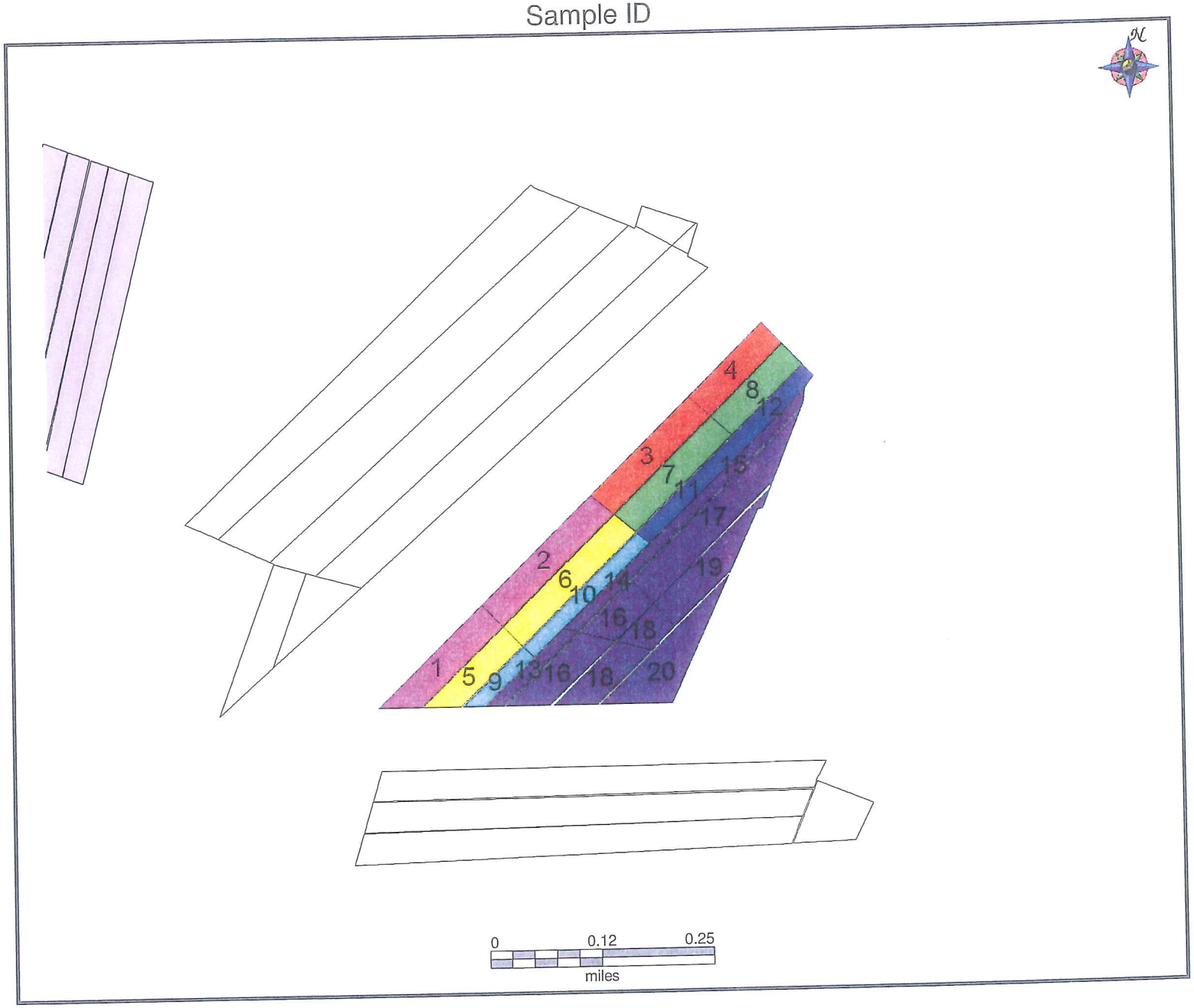
lime lbs



Client: Pugh, Dawson
Farm: Norwood
Field: Norwood
Crop: 2012 Cotton
Name: Norwood - Application
Type: Application
Date: 2/29/2012
lime lbs: 79.176 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Norwood
Sample ID



Client: Pugh, Dawson
Farm: Norwood
Field: Norwood
Name: zone map
Min: 1
Max: 20
Avg: 11

- 13 - 20
- 11 - 12
- 9 - 10
- 7 - 8
- 5 - 6
- 3 - 4
- 1 - 2

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL012346

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: NORWOOD

Links to Helpful Information

Sampled: | Received: 10/27/2011 | Completed: 11/07/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.01	1.01	7.5	77	1.7	5.6	164	78	58	14	73	92	62	69	45	45	102	0.3			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.61	1.02	7.9	80	1.6	5.8	130	67	59	16	66	104	69	76	36	36	98	0.3			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0-20	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	20-40	0		0	0	0	0	Note: 3

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
0.92	1.13	6.0	82	1.1	5.7	65	61	60	16	53	92	62	69	50	50	47	0.2			

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0-20	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	40-60	0		0	0	0	0	Note: 3

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
0.36	1.06	5.9	78	1.3	5.3	63	46	56	18	70	82	56	63	54	54	40	0.5			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
0.97	1.06	6.5	74	1.7	5.5	105	63	56	14	61	80	55	62	42	42	91	0.2			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
0.92	1.03	7.3	79	1.5	5.7	97	65	60	16	54	95	64	71	44	44	96	0.3			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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	1.11	6.0	73	1.6	5.2	85	61	52	16	52	78	54	61	49	49	60	0.3			

Dawson Pugh

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.46	1.04	6.3	79	1.3	5.3	92	52	55	20	73	78	54	61	54	54	37	0.6			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
0.86	1.00	7.2	81	1.4	5.7	88	67	60	16	52	96	65	72	42	42	56	0.2			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
0.76	1.06	7.9	81	1.5	5.5	77	66	60	18	63	84	57	64	40	40	47	0.4			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	10-30	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	40-60	0		0	0	0	0	Note: 3

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
0.36	1.11	6.3	86	0.9	5.9	52	43	65	18	53	106	71	78	45	45	42	0.4			

Dawson Pugh

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.41	1.07	7.8	85	1.2	5.5	81	48	56	25	113	90	61	68	56	56	40	1.4			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.81	1.04	5.7	72	1.6	5.2	83	52	54	15	55	79	54	61	38	38	100	0.3			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.5	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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
1.08	1.03	7.0	70	2.1	5.2	101	61	49	16	72	93	63	70	34	34	116	0.7			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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	0.97	7.5	80	1.5	5.1	71	49	56	22	80	70	49	56	41	41	34	0.9			

Dawson Pugh

Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.2	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.25	1.05	7.1	75	1.8	5.4	75	63	55	16	71	63	45	52	31	31	65	0.5			

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.3	50-70	10-30	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	40-60	0		0	0	0	0	Note: 3

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	1.08	6.8	75	1.7	5.0	53	44	52	20	83	66	47	54	68	68	43	0.9			

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.97	1.05	7.1	76	1.7	5.5	71	51	55	17	61	74	51	58	46	46	71	0.5			

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	20-40	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	40-60	0		0	0	0	0	Note: 3

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
0.56	1.00	5.8	76	1.4	5.2	45	44	54	18	60	58	42	49	65	65	58	0.5			

Dawson Pugh

Sample ID: 20

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 - Cotton	1.2	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.92	1.05	7.5	77	1.7	5.3	97	62	55	18	76	96	65	72	41	41	37	0.8			

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 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

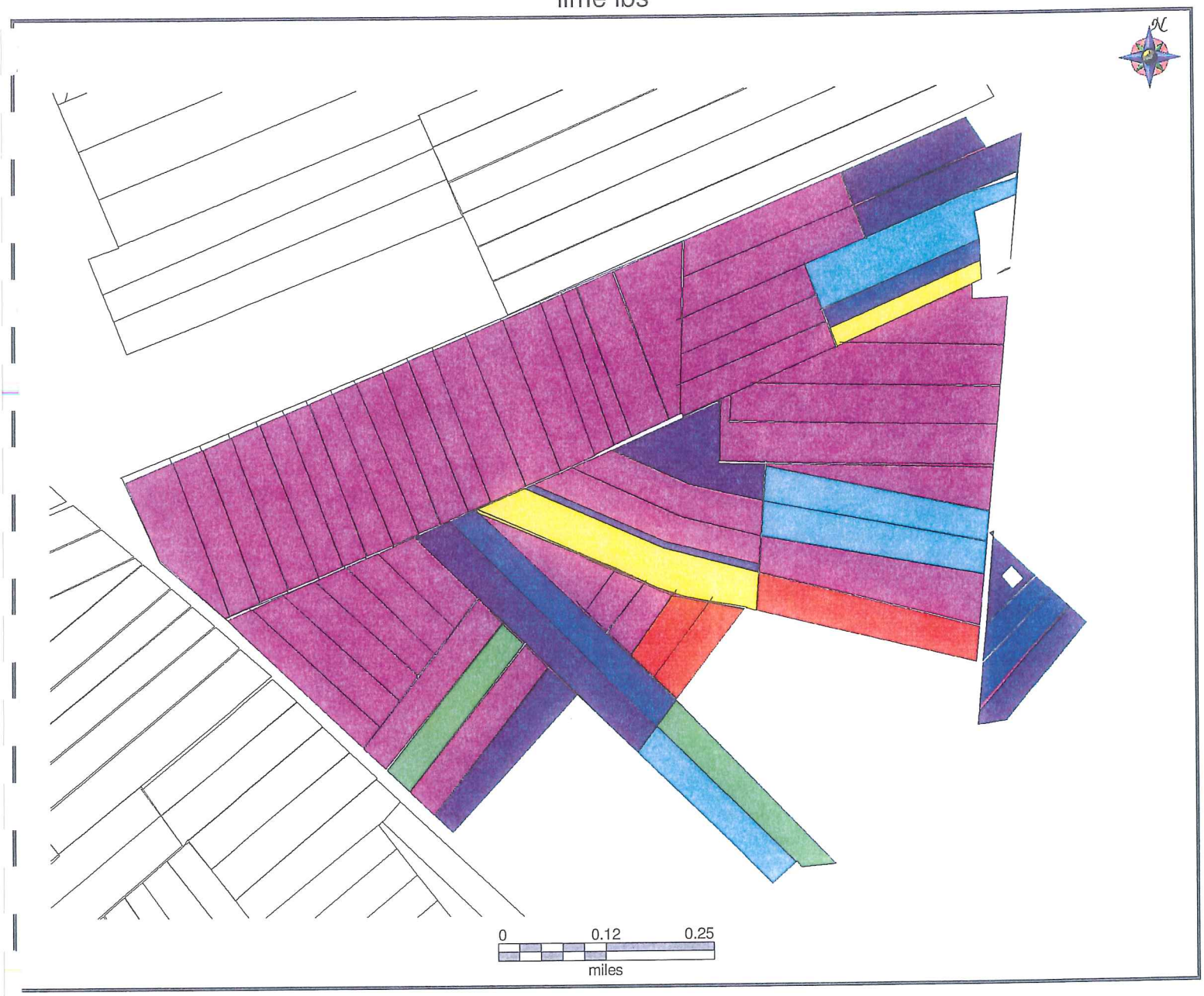
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Middletown - 2012 Cotton: Application

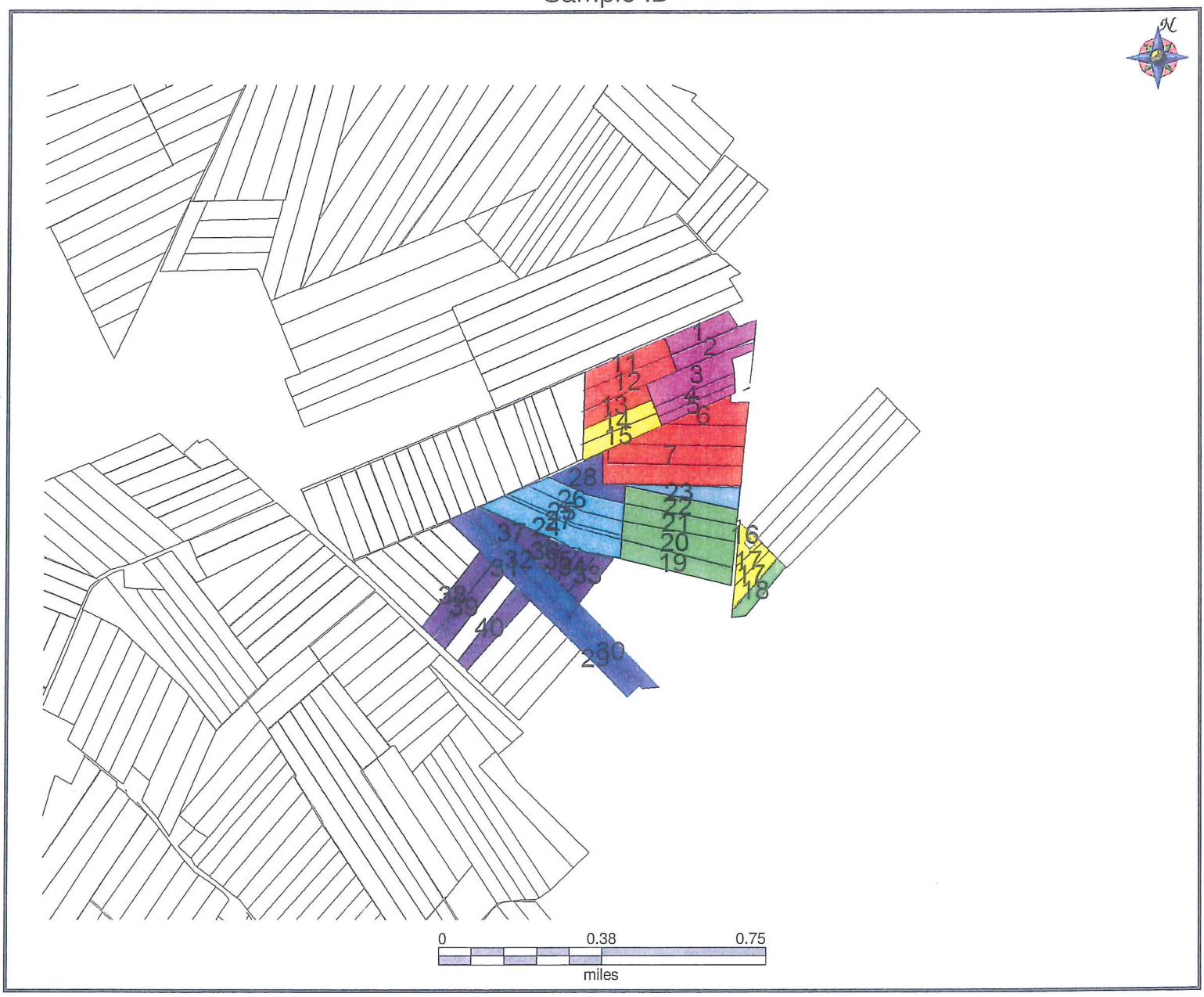
lime lbs



Client: Pugh, Dawson
Farm: Middletown
Field: Middletown
Crop: 2012 Cotton
Name: Middletown - Application
Type: Application
Date: 2/29/2012
lime lbs: 189.717 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 2400.00 lbs/ac
- 2250.00 lbs/ac
- 1950.00 lbs/ac
- 1650.00 lbs/ac
- 1500.00 lbs/ac
- 1050.00 lbs/ac
- 900.00 lbs/ac

Middletown
Sample ID



Client: Pugh, Dawson
Farm: Middletown
Field: Middletown
Name: zone map
Min: 1
Max: 40
Avg: 22

- 33 - 40
- 28 - 32
- 23 - 27
- 18 - 22
- 14 - 17
- 6 - 13
- 1 - 5

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL008318

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde MIDDLETOWN

Sampled: | Received: 10/03/2011 | Completed: 10/11/2011 | Farm: MALCOLM MCKENNY

Links to Helpful Information

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	1.06	9.1	86	1.3	5.5	78	74	58	24	149	49	36	43	59	59	60	3.9			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.67	1.04	8.3	86	1.2	5.3	79	83	54	27	178	48	36	43	60	60	42	4.4			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.55	1.02	10.5	89	1.2	5.8	100	85	57	28	151	32	26	33	75	75	52	4.6			

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: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.7	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.80	1.03	8.8	85	1.3	5.7	79	78	56	25	122	32	26	33	37	37	37	3.1			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.67	1.03	9.8	89	1.1	6.0	83	79	62	23	93	46	35	42	29	29	37	1.8			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.4	50-70	0-20	0-20	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	0-20	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.67	1.04	8.2	85	1.2	6.0	61	77	66	15	53	50	37	44	18	18	47	0.4			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.5	50-70	10-30	10-30	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	0-20	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.55	1.04	8.2	83	1.4	6.0	52	73	64	14	48	54	39	46	12	12	41	0.3			

Sample ID: 8

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 - Cotton	0.6	50-70	10-30	10-30	0	0	0	6	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	10-30	0-20	0		0	$	0	0	Note: 3 Note: $

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
1.31	1.06	8.1	84	1.3	5.9	54	73	65	15	47	70	49	56	9	9	42	0.4			

Sample ID: 9

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 - Cotton	0.7	50-70	0-20	20-40	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0-20	10-30	0		0	0	0	0	Note: 3

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
1.37	1.07	7.6	82	1.4	5.8	59	62	63	15	41	57	41	48	35	35	51	0.3			

Sample ID: 10

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 - Cotton	0.4	50-70	0-20	20-40	0	0	0	6	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0-20	20-40	0		0	$	0	0	Note: 3 Note: $

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
1.31	1.08	8.0	86	1.1	6.0	58	60	67	15	34	70	49	56	21	21	54	0.3			

Sample ID: 11

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 - Cotton	1.3	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.29	1.01	9.1	78	2.0	5.4	243	88	57	16	122	71	50	57	64	64	72	2.5			

Sample ID: 12

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 - Cotton	1.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.68	1.01	8.6	72	2.4	5.0	223	98	50	17	138	76	53	60	55	55	72	2.9			

Sample ID: 13

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 - Cotton	1.4	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.37	1.03	8.2	78	1.8	5.0	180	100	54	18	139	83	57	64	66	66	70	2.7			

Sample ID: 14

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 - Cotton	1.2	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.87	1.01	9.7	78	2.1	5.7	147	77	61	14	74	59	42	49	52	52	80	0.8			

Sample ID: 15

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 - Cotton	0.5	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.74	1.04	8.3	81	1.6	6.0	133	71	64	13	52	62	44	51	50	50	81	0.4			

Sample ID: 16

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 - Cotton	0.9	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.49	1.10	7.9	81	1.5	5.6	79	70	59	17	55	62	44	51	65	65	87	0.5			

Sample ID: 17

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 - Cotton	0.7	50-70	40-60	50-70	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	40-60	40-60	0		0	$	0	0	Note: 3 Note: $

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
0.86	1.07	6.9	84	1.1	5.5	39	47	61	20	64	71	50	57	25	25	46	1.2			

Sample ID: 18

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 - Cotton	1.0	50-70	20-40	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	20-40	0		0	0	0	0	Note: 3

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
0.97	1.11	7.7	82	1.4	5.3	49	55	57	21	95	95	64	71	28	28	46	2.0			

Sample ID: 19

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 - Cotton	0.3	50-70	0	10-30	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	$	0	0	Note: 3 Note: $

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
1.14	1.08	8.3	88	1.0	6.0	85	71	65	19	51	86	59	66	25	25	47	0.7			

Sample ID: 20

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0-20	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
0.92	1.06	8.4	88	1.0	6.3	89	80	68	16	43	91	60	67	25	25	41	0.4			

Sample ID: 21

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.6	50-70	20-40	20-40	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	10-30	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.08	1.09	8.1	83	1.4	5.9	46	64	61	18	45	64	45	52	22	22	35	0.4			

Sample ID: 22

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.6	50-70	20-40	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	10-30	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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	1.06	7.8	82	1.4	5.9	48	62	61	18	45	56	41	48	108	108	47	0.4			

Sample ID: 23

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	20-40	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.14	1.08	8.0	88	1.0	6.2	49	86	65	17	46	73	51	58	42	42	54	0.4			

Sample ID: 24

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.4	50-70	0-20	20-40	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	10-30	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.19	1.01	7.3	85	1.1	6.0	61	63	63	17	54	69	48	55	20	20	41	0.4			

Sample ID: 25

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	10-30	20-40	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	10-30	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.14	1.03	7.4	88	0.9	6.1	52	65	67	16	44	85	59	66	24	24	40	0.3			

Sample ID: 26

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	10-30	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.31	1.02	8.5	87	1.1	6.1	66	75	67	16	45	77	55	62	19	19	39	0.3			

Sample ID: 27

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.7	50-70	10-30	20-40	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	10-30	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.19	1.07	8.2	79	1.7	5.9	55	63	61	15	39	64	45	52	14	14	33	0.3			

Sample ID: 28

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 - Cotton	0.9	50-70	0-20	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0-20	0-20	0		0	0	0	0	Note: 3

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
1.67	1.07	8.4	81	1.6	5.7	64	77	61	15	41	66	47	54	26	26	36	0.3			

Sample ID: 29

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 - Cotton	0.6	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.81	1.07	9.2	89	1.0	5.7	87	93	54	30	120	73	51	58	41	41	51	4.3			

Sample ID: 30

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 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.71	1.08	8.4	86	1.2	5.9	86	78	55	26	113	83	57	64	28	28	47	2.9			

Sample ID: 31

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 - Cotton	0.8	50-70	0	0-20	0	0	0	6	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	$	0	0	Note: 3 Note: $

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
2.01	1.02	9.5	84	1.5	5.8	118	81	60	20	64	50	37	44	21	21	47	0.5			

Sample ID: 32

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.7	50-70	0	0-20	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.80	1.01	9.5	83	1.6	5.9	122	87	61	18	60	69	48	55	24	24	51	0.5			

Sample ID: 33

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0-20	10-30	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	0-20	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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	1.07	8.3	83	1.4	6.1	57	72	62	17	41	72	50	57	18	18	53	0.4			

Sample ID: 34

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	30-50	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
0.86	1.09	7.9	84	1.3	6.1	70	56	62	18	43	81	56	63	15	15	58	0.4			

Sample ID: 35

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0-20	40-60	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	30-50	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
0.76	1.06	8.2	87	1.1	6.3	60	49	65	18	44	60	41	48	17	17	44	0.4			

Sample ID: 36

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	20-40	30-50	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	30-50	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
0.76	1.10	7.9	86	1.1	6.1	49	54	66	16	35	69	50	57	15	15	38	0.3			

Sample ID: 37

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0	0	0	0	6	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	$	0	0	Note: 3 Note: $

Nutrients (lb/acre)

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
1.08	1.03	11.6	92	0.9	6.4	125	92	75	14	46	119	75	82	23	23	51	0.3			

Sample ID: 28

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.9	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
2.68	0.96	9.3	83	1.6	5.7	220	97	53	24	96	52	38	45	53	53	70	1.8			

Sample ID: 39

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
2.37	1.00	10.0	84	1.6	6.0	230	87	59	21	67	46	35	42	43	43	70	0.6			

Sample ID: 40

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 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.49	1.01	11.8	86	1.6	5.8	318	117	54	27	112	66	47	54	37	37	71	2.5			

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 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

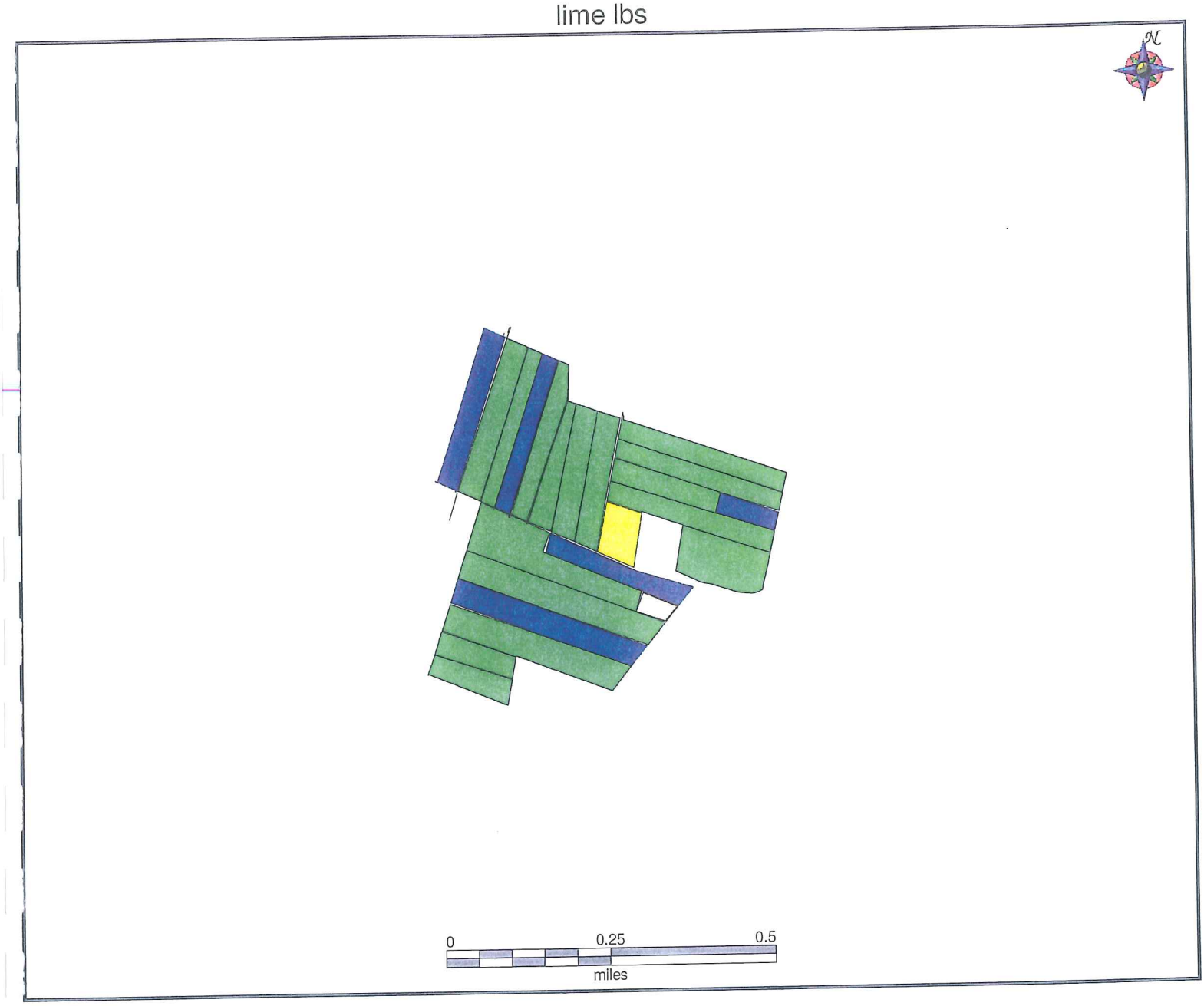
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Goshen - 2012 Cotton: Application

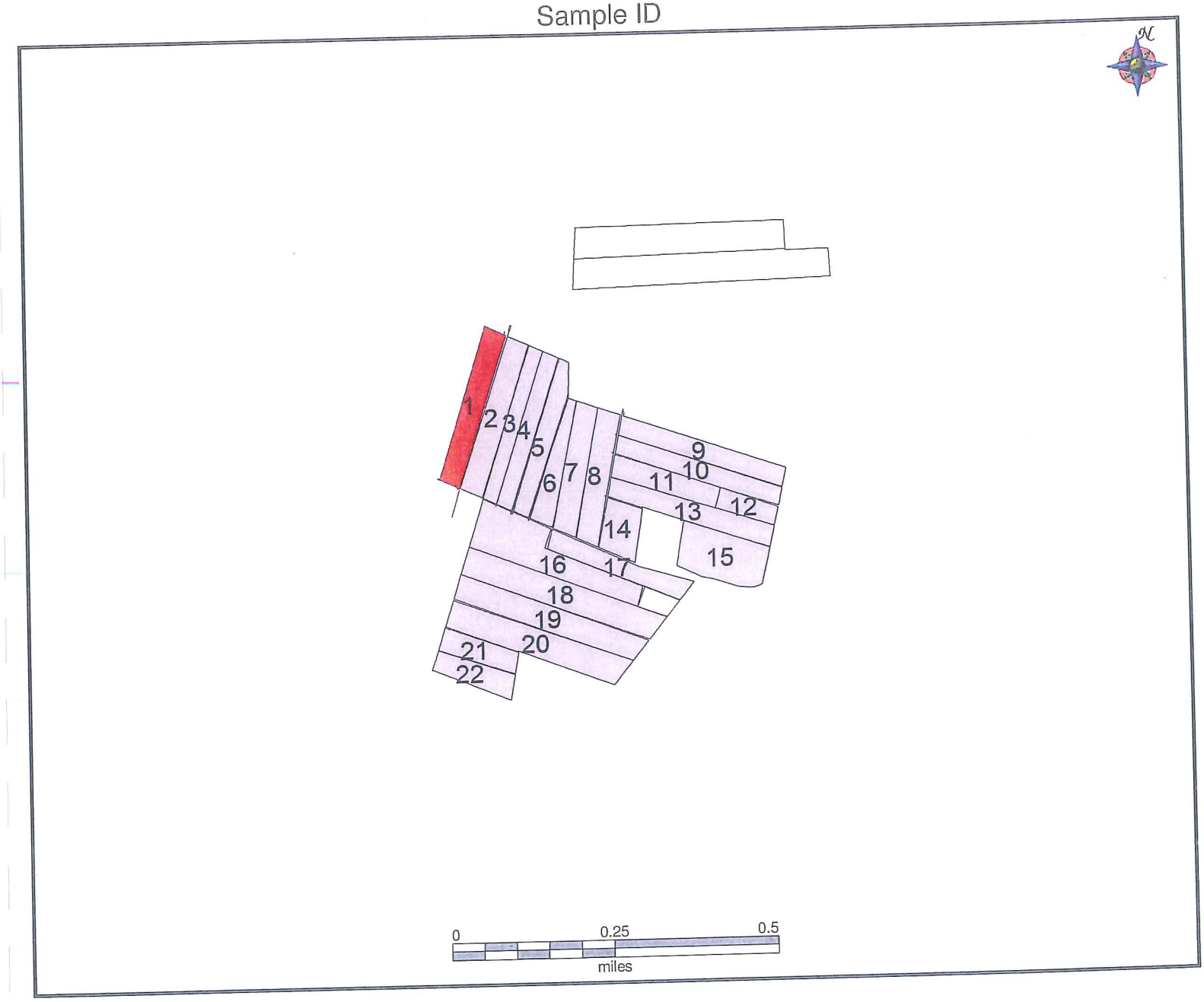
lime lbs



Client: Pugh, Dawson
Farm: Goshen
Field: Goshen
Crop: 2012 Cotton
Name: Goshen - Application
Type: Application
Date: 2/29/2012
lime lbs: 174.189 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Goshen
Sample ID



Client: Pugh, Dawson
Farm: Goshen
Field: Goshen
Name: zone map
Min: 1
Max: 22
Avg: 12

1

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL008282

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: GOSHEN

Links to Helpful Information

Sampled: | Received: 09/30/2011 | Completed: 10/11/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.67	1.06	10.0	80	2.0	5.4	121	65	58	19	99	96	65	72	39	39	70	1.5			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.87	1.01	9.5	84	1.5	5.6	106	70	63	18	80	111	74	81	39	39	77	1.1			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.31	1.04	10.4	85	1.6	5.8	95	64	64	18	73	125	82	89	43	43	66	1.5			

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.61	1.06	9.4	80	1.9	5.3	94	74	58	17	82	89	60	67	50	50	73	1.8			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.49	1.05	9.2	84	1.5	5.6	93	69	63	17	70	103	69	76	40	40	70	0.9			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.67	1.03	9.6	83	1.6	5.5	88	63	63	16	71	122	80	87	33	33	64	0.9			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.43	1.07	8.5	81	1.6	5.4	88	80	60	17	70	99	66	73	54	54	86	1.1			

Dawson Pugh

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.31	1.07	8.8	80	1.8	5.6	78	64	58	17	67	106	71	78	40	40	68	1.3			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0-20	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	20-40	0		0	0	0	0	Note: 3

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
1.37	1.09	8.3	80	1.7	5.5	60	57	57	18	64	91	62	69	57	57	67	1.1			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	10-30	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	10-30	20-40	0		0	0	0	0	Note: 3

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
1.25	1.08	8.0	79	1.7	5.5	55	61	58	18	64	104	69	76	50	50	58	0.9			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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
1.14	1.07	8.1	79	1.7	5.4	80	61	56	19	79	113	75	82	55	55	65	1.8			

Dawson Pugh

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.02	1.11	8.8	75	2.2	5.5	67	57	53	19	67	108	72	79	68	68	55	1.7			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.08	1.10	8.7	80	1.7	5.6	77	75	57	20	76	102	68	75	60	60	79	2.0			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.7	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.71	1.05	7.4	85	1.1	5.5	74	68	60	20	61	77	53	60	83	83	60	1.1			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0-20	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.81	1.09	8.7	85	1.3	5.4	62	70	50	31	151	86	59	66	65	65	62	5.2			

Dawson Pugh

Sample ID: 16	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 - Cotton	1.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.97	1.06	8.9	82	1.6	5.5	88	79	57	21	90	88	60	67	35	35	39	2.3			

Sample ID: 17	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 - Cotton	1.4	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.92	1.06	9.5	80	1.9	5.2	75	93	53	22	123	91	62	69	73	73	53	3.1			

Sample ID: 18	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 - Cotton	1.1	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.76	1.07	8.8	82	1.6	5.2	66	77	50	28	115	88	60	67	85	85	74	4.3			

Sample ID: 19	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 - Cotton	1.3	50-70	10-30	30-50	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	10-30	20-40	0		0	0	0	0	Note: 3

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
0.81	1.08	10.1	80	2.0	5.4	51	59	56	22	76	87	59	66	66	66	93	2.2			

Dawson Pugh

Sample ID: 20

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
0.81	1.07	9.8	84	1.6	5.5	91	65	59	21	99	85	58	65	140	140	140	3.0			

Sample ID: 21

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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
0.71	1.07	8.1	80	1.6	5.4	76	48	54	23	87	77	53	60	77	77	119	2.7			

Sample ID: 22

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.1	50-70	0-20	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	30-50	0		0	0	0	0	Note: 3

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
0.71	1.07	6.4	77	1.5	5.2	65	49	53	20	77	75	52	59	66	66	108	1.4			

Sample ID: 23

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.81	1.10	8.5	74	2.2	5.5	80	72	48	21	94	93	63	70	59	59	90	2.2			

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 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* for more information.

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

Jolly - 2012 Cotton: Application
lime lbs

Client: Pugh, Dawson
Farm: White Plains
Field: Jolly
Crop: 2012 Cotton
Name: Jolly - Application
Type: Application
Date: 2/29/2012
lime lbs: 61.541 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Jolly
Sample ID

Client: Pugh, Dawson
Farm: White Plains
Field: Jolly
Name: zone map
Min: 34
Max: 54
Avg: 45

- 46 - 54
- 44 - 45
- 42 - 43
- 40 - 41
- 38 - 39
- 36 - 37
- 34 - 35

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL014677

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde JOLLY

Farm: WHITE PLAINS

Links to Helpful Information

Sampled: | Received: 11/10/2011 | Completed: 11/28/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.80	0.96	9.0	84	1.4	6.2	88	92	59	21	84	73	51	58	64	64	56	0.7			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.74	0.94	8.9	85	1.3	6.2	104	71	57	25	104	82	56	63	77	77	55	1.2			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.97	9.0	84	1.4	6.4	102	97	59	20	69	76	50	57	64	64	54	0.9			

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: 4

Lime History:	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
	1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.43	0.95	8.9	84	1.4	6.2	110	78	57	23	84	69	48	55	71	71	54	1.0			

Sample ID: 5

Lime History:	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
	1 - Cotton	0.3	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.98	8.7	82	1.6	6.1	106	93	54	22	88	70	49	56	53	53	46	0.9			

Sample ID: 6

Lime History:	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
	1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.31	0.96	9.3	87	1.2	6.2	126	70	58	25	102	65	46	53	61	61	51	1.3			

Sample ID: 7

Lime History:	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
	1 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.37	1.01	8.1	81	1.5	6.0	133	87	51	25	93	62	44	51	39	39	44	1.1			

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Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.49	0.98	9.3	83	1.6	6.0	107	72	54	25	119	61	44	51	47	47	49	1.3			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	1.01	9.3	86	1.3	6.2	107	85	57	25	85	74	51	58	64	64	53	1.4			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.19	1.07	9.2	87	1.2	6.3	107	84	56	26	74	74	50	57	60	60	55	1.4			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.97	1.06	9.0	89	1.0	6.3	85	77	58	26	64	93	61	68	56	56	52	1.1			

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Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.92	1.08	8.9	88	1.1	6.3	95	81	56	27	63	89	59	66	57	57	52	1.2			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.86	1.07	8.4	86	1.2	6.0	87	71	55	26	77	78	54	61	57	57	50	1.5			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.92	1.06	9.3	87	1.2	6.1	126	97	57	25	72	72	52	59	100	100	70	1.6			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.92	1.09	9.8	88	1.2	6.1	284	89	59	24	73	78	55	62	174	174	80	1.6			

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Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	pH$	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		pH$	0	0	0	Note: 3 Note: $

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	1.11	9.4	90	0.9	6.5	115	80	60	26	56	101	63	70	55	55	53	1.3			

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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	1.10	10.1	90	1.0	6.4	133	78	62	25	58	113	72	79	71	71	52	1.1			

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	89	1.1	6.2	74	105	50	34	115	30	25	32	69	69	36	2.8			

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	90	1.0	6.2	70	100	50	35	107	26	23	30	67	67	43	2.5			

Sample ID: 28

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.49	1.04	9.3	81	1.8	5.7	163	125	50	24	87	53	39	46	52	52	53	1.2			

Sample ID: 29

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	1.01	10.9	87	1.4	6.2	147	144	54	27	106	81	56	63	59	59	60	1.9			

Sample ID: 30

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.84	0.98	9.3	76	2.2	5.9	241	85	56	16	74	63	45	52	62	62	66	0.5			

Sample ID: 31

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.76	1.01	9.4	80	1.9	5.9	279	103	62	13	64	67	47	54	62	62	74	0.4			

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Sample ID: 32

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.44	0.99	9.3	81	1.8	5.9	216	110	53	22	92	52	38	45	65	65	72	1.6			

Sample ID: 33

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.68	0.94	10.7	84	1.7	6.0	176	100	60	20	81	57	41	48	76	76	83	1.1			

Sample ID: 34

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.68	0.93	12.3	87	1.6	6.4	179	78	66	17	73	30	22	29	53	53	108	0.7			

Sample ID: 35

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.60	0.95	9.7	84	1.6	6.3	191	81	58	21	77	33	25	32	46	46	102	0.6			

Sample ID: 36

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.84	0.89	8.8	77	2.0	5.9	190	76	51	22	78	26	23	30	50	50	108	0.6			

Sample ID: 37

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
3.10	0.84	8.8	77	2.0	5.8	186	85	52	20	79	25	22	29	53	53	109	0.7			

Sample ID: 38

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.76	0.88	8.9	78	2.0	5.9	231	85	53	20	75	28	24	31	52	52	112	0.6			

Sample ID: 39

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.87	1.03	9.4	89	1.0	6.6	142	89	53	32	79	31	19	26	72	72	63	1.6			

Dawson Pugh

Sample ID: 40

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.44	0.97	9.7	85	1.5	6.3	93	79	52	29	87	31	24	31	66	66	71	1.4			

Sample ID: 41

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.67	1.02	10.3	93	0.7	6.7	111	95	56	33	96	43	25	32	93	93	73	2.2			

Sample ID: 42

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	0.99	10.1	88	1.2	6.3	114	103	53	30	90	32	25	32	74	74	76	1.7			

Sample ID: 43

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.37	1.04	9.5	91	0.9	6.6	117	106	51	34	82	30	19	26	88	88	75	2.4			

Dawson Pugh

Sample ID: 44

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 - Cotton	0.9	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.87	1.05	11.2	85	1.7	5.8	106	97	54	27	124	57	41	48	164	164	94	2.1			

Sample ID: 45

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	0.97	10.7	87	1.4	6.2	130	75	62	22	79	64	45	52	187	187	124	1.1			

Sample ID: 46

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 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.01	0.93	9.6	81	1.8	5.9	105	92	51	26	94	44	33	40	120	120	86	1.5			

Sample ID: 47

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	0.97	8.3	86	1.2	6.1	137	70	53	28	80	40	32	39	75	75	92	1.4			

Dawson Pugh

Sample ID: 48

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.87	8.2	83	1.4	6.1	155	70	53	25	74	41	32	39	69	69	105	0.7			

Sample ID: 49

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.14	0.94	8.4	87	1.1	6.4	122	74	53	30	64	45	31	38	77	77	86	0.9			

Sample ID: 50

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.96	8.7	84	1.4	6.1	133	65	54	26	86	50	37	44	78	78	94	0.9			

Sample ID: 51

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.93	9.9	86	1.4	6.1	127	89	53	29	85	42	32	39	71	71	72	1.0			

Dawson Pugh

Sample ID: 52

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	1.01	10.2	85	1.5	6.3	132	75	55	27	90	50	35	42	82	82	89	1.0			

Sample ID: 53

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
2.29	0.93	10.4	82	1.9	5.8	132	63	62	16	82	45	34	41	60	60	84	1.2			

Sample ID: 54

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.37	0.96	8.4	73	2.3	5.6	148	79	51	18	77	61	44	51	70	70	80	0.6			

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 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* for more information.

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

New Road - 2012 Cotton: Application

lime lbs

Client: Pugh, Dawson
Farm: White Plains
Field: New Road
Crop: 2012 Cotton
Name: New Road - Application
Type: Application
Date: 2/29/2012
lime lbs: 25.071 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 2700.00 lbs/ac
- 2400.00 lbs/ac
- 1800.00 lbs/ac
- 0.00 lbs/ac

New Road
Sample ID

Client: Pugh, Dawson
Farm: White Plains
Field: New Road
Name: zone map
Min: 30
Max: 33
Avg: 32

31
30

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL014677

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde NEW ROAD

Farm: WHITE PLAINS

Links to Helpful Information

Sampled: | Received: 11/10/2011 | Completed: 11/28/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.80	0.96	9.0	84	1.4	6.2	88	92	59	21	84	73	51	58	64	64	56	0.7			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.74	0.94	8.9	85	1.3	6.2	104	71	57	25	104	82	56	63	77	77	55	1.2			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.97	9.0	84	1.4	6.4	102	97	59	20	69	76	50	57	64	64	54	0.9			

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.43	0.95	8.9	84	1.4	6.2	110	78	57	23	84	69	48	55	71	71	54	1.0			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.98	8.7	82	1.6	6.1	106	93	54	22	88	70	49	56	53	53	46	0.9			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.31	0.96	9.3	87	1.2	6.2	126	70	58	25	102	65	46	53	61	61	51	1.3			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.37	1.01	8.1	81	1.5	6.0	133	87	51	25	93	62	44	51	39	39	44	1.1			

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Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.49	0.98	9.3	83	1.6	6.0	107	72	54	25	119	61	44	51	47	47	49	1.3			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	1.01	9.3	86	1.3	6.2	107	85	57	25	85	74	51	58	64	64	53	1.4			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.19	1.07	9.2	87	1.2	6.3	107	84	56	26	74	74	50	57	60	60	55	1.4			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.97	1.06	9.0	89	1.0	6.3	85	77	58	26	64	93	61	68	56	56	52	1.1			

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Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.92	1.08	8.9	88	1.1	6.3	95	81	56	27	63	89	59	66	57	57	52	1.2			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.86	1.07	8.4	86	1.2	6.0	87	71	55	26	77	78	54	61	57	57	50	1.5			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.92	1.06	9.3	87	1.2	6.1	126	97	57	25	72	72	52	59	100	100	70	1.6			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
0.92	1.09	9.8	88	1.2	6.1	284	89	59	24	73	78	55	62	174	174	80	1.6			

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Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	pH$	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		pH$	0	0	0	Note: 3 Note: $

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	1.11	9.4	90	0.9	6.5	115	80	60	26	56	101	63	70	55	55	53	1.3			

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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	1.10	10.1	90	1.0	6.4	133	78	62	25	58	113	72	79	71	71	52	1.1			

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	89	1.1	6.2	74	105	50	34	115	30	25	32	69	69	36	2.8			

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	90	1.0	6.2	70	100	50	35	107	26	23	30	67	67	43	2.5			

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Sample ID: 28

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.49	1.04	9.3	81	1.8	5.7	163	125	50	24	87	53	39	46	52	52	53	1.2			

Sample ID: 29

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	1.01	10.9	87	1.4	6.2	147	144	54	27	106	81	56	63	59	59	60	1.9			

Sample ID: 30

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.84	0.98	9.3	76	2.2	5.9	241	85	56	16	74	63	45	52	62	62	66	0.5			

Sample ID: 31

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.76	1.01	9.4	80	1.9	5.9	279	103	62	13	64	67	47	54	62	62	74	0.4			

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Sample ID: 32

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.44	0.99	9.3	81	1.8	5.9	216	110	53	22	92	52	38	45	65	65	72	1.6			

Sample ID: 33

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.68	0.94	10.7	84	1.7	6.0	176	100	60	20	81	57	41	48	76	76	83	1.1			

Sample ID: 34

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.68	0.93	12.3	87	1.6	6.4	179	78	66	17	73	30	22	29	53	53	108	0.7			

Sample ID: 35

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.60	0.95	9.7	84	1.6	6.3	191	81	58	21	77	33	25	32	46	46	102	0.6			

Sample ID: 36

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 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.84	0.89	8.8	77	2.0	5.9	190	76	51	22	78	26	23	30	50	50	108	0.6			

Sample ID: 37

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 - Cotton	1.0	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
3.10	0.84	8.8	77	2.0	5.8	186	85	52	20	79	25	22	29	53	53	109	0.7			

Sample ID: 38

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 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.76	0.88	8.9	78	2.0	5.9	231	85	53	20	75	28	24	31	52	52	112	0.6			

Sample ID: 39

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 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.87	1.03	9.4	89	1.0	6.6	142	89	53	32	79	31	19	26	72	72	63	1.6			

Dawson Pugh

Sample ID: 40

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.44	0.97	9.7	85	1.5	6.3	93	79	52	29	87	31	24	31	66	66	71	1.4			

Sample ID: 41

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.67	1.02	10.3	93	0.7	6.7	111	95	56	33	96	43	25	32	93	93	73	2.2			

Sample ID: 42

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	0.99	10.1	88	1.2	6.3	114	103	53	30	90	32	25	32	74	74	76	1.7			

Sample ID: 43

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.37	1.04	9.5	91	0.9	6.6	117	106	51	34	82	30	19	26	88	88	75	2.4			

Dawson Pugh

Sample ID: 44

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.87	1.05	11.2	85	1.7	5.8	106	97	54	27	124	57	41	48	164	164	94	2.1			

Sample ID: 45

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	0.97	10.7	87	1.4	6.2	130	75	62	22	79	64	45	52	187	187	124	1.1			

Sample ID: 46

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.01	0.93	9.6	81	1.8	5.9	105	92	51	26	94	44	33	40	120	120	86	1.5			

Sample ID: 47

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	0.97	8.3	86	1.2	6.1	137	70	53	28	80	40	32	39	75	75	92	1.4			

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Sample ID: 48

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.87	8.2	83	1.4	6.1	155	70	53	25	74	41	32	39	69	69	105	0.7			

Sample ID: 49

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.14	0.94	8.4	87	1.1	6.4	122	74	53	30	64	45	31	38	77	77	86	0.9			

Sample ID: 50

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.96	8.7	84	1.4	6.1	133	65	54	26	86	50	37	44	78	78	94	0.9			

Sample ID: 51

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.3	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
1.55	0.93	9.9	86	1.4	6.1	127	89	53	29	85	42	32	39	71	71	72	1.0			

Sample ID: 52

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	1.01	10.2	85	1.5	6.3	132	75	55	27	90	50	35	42	82	82	89	1.0			

Sample ID: 53

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
2.29	0.93	10.4	82	1.9	5.8	132	63	62	16	82	45	34	41	60	60	84	1.2			

Sample ID: 54

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.37	0.96	8.4	73	2.3	5.6	148	79	51	18	77	61	44	51	70	70	80	0.6			

Dawson Pugh

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 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* for more information.

Report Abbreviations

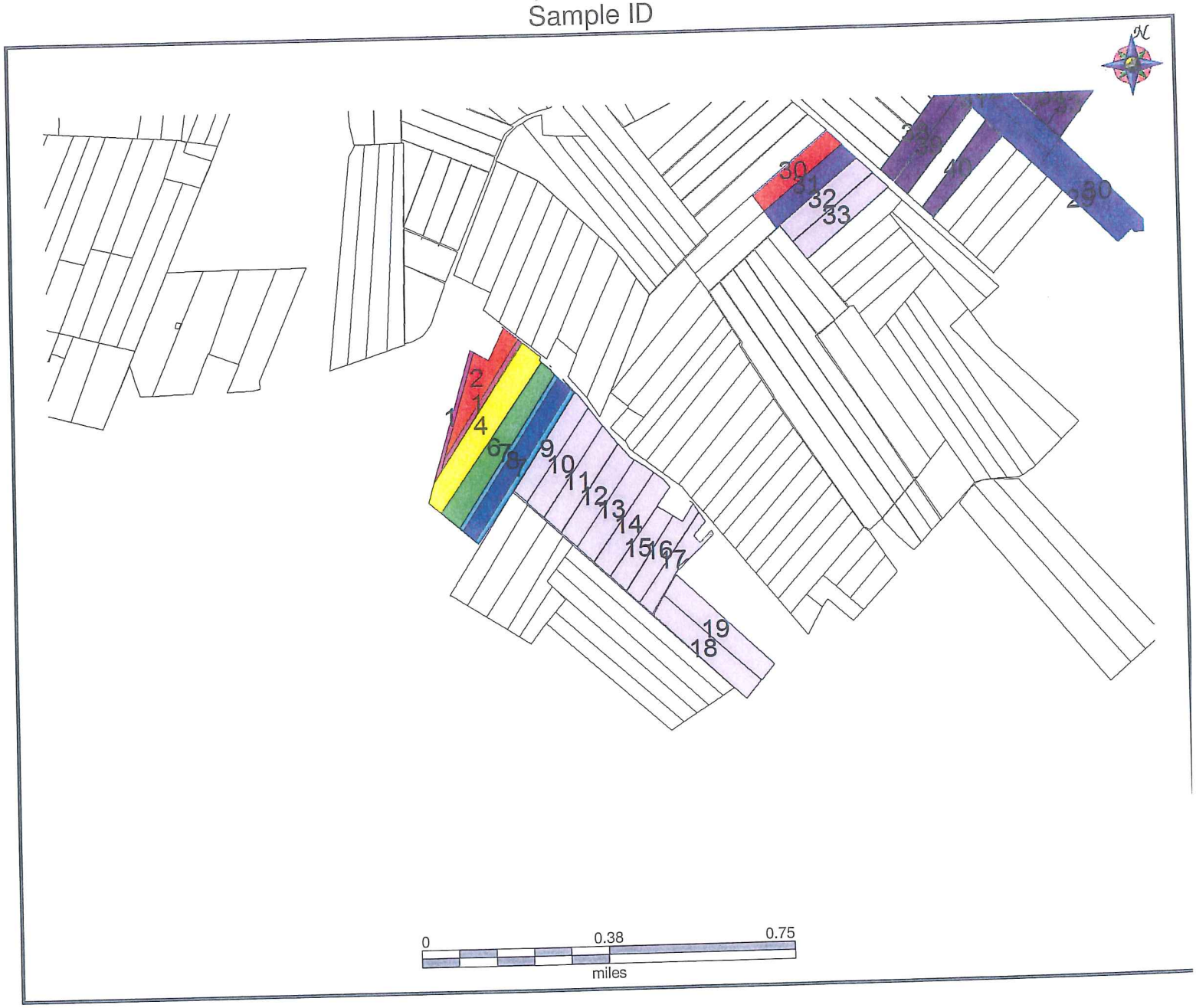
Ac	exchangeable acidity
B	boron
BS%	% CEC occupied by basic cations
Ca%	% CEC occupied by calcium
CEC	cation exchange capacity
Cu-I	copper index
ESP	exchangeable sodium percent
HM%	percent humic matter
K-I	potassium index
K_2O	potash
Mg%	% CEC occupied by magnesium
MIN	mineral soil class
Mn	manganese
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

Payne/Murray - 2012 Cotton: Application
lime lbs

Client: Pugh, Dawson
Farm: White Plains
Field: Payne/Murray
Crop: 2012 Cotton
Name: Payne/Murray - Application
Type: Application
Date: 2/29/2012
lime lbs: 12.605 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 1500.00 lbs/ac
- 1200.00 lbs/ac
- 0.00 lbs/ac

Payne/Murray
Sample ID



Client: Pugh, Dawson
Farm: White Plains
Field: Payne/Murray
Name: zone map
Min: 1
Max: 19
Avg: 10

- 8
- 7
- 6
- 4
- 2
- 1

NCDA&CS Agronomic Division | Phone: (919) 733-2655 | Website: www.ncagr.gov/agronomi/ | Report No. FY12-SL014677

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde PAYNE

Farm: WHITE PLAINS

Links to Helpful Information

Sampled: | Received: 11/10/2011 | Completed: 11/28/2011

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.80	0.96	9.0	84	1.4	6.2	88	92	59	21	84	73	51	58	64	64	56	0.7			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.74	0.94	8.9	85	1.3	6.2	104	71	57	25	104	82	56	63	77	77	55	1.2			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.97	9.0	84	1.4	6.4	102	97	59	20	69	76	50	57	64	64	54	0.9			

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.43	0.95	8.9	84	1.4	6.2	110	78	57	23	84	69	48	55	71	71	54	1.0			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.55	0.98	8.7	82	1.6	6.1	106	93	54	22	88	70	49	56	53	53	46	0.9			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.31	0.96	9.3	87	1.2	6.2	126	70	58	25	102	65	46	53	61	61	51	1.3			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.37	1.01	8.1	81	1.5	6.0	133	87	51	25	93	62	44	51	39	39	44	1.1			

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Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.49	0.98	9.3	83	1.6	6.0	107	72	54	25	119	61	44	51	47	47	49	1.3			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	1.01	9.3	86	1.3	6.2	107	85	57	25	85	74	51	58	64	64	53	1.4			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.19	1.07	9.2	87	1.2	6.3	107	84	56	26	74	74	50	57	60	60	55	1.4			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
0.97	1.06	9.0	89	1.0	6.3	85	77	58	26	64	93	61	68	56	56	52	1.1			

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Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
0.92	1.08	8.9	88	1.1	6.3	95	81	56	27	63	89	59	66	57	57	52	1.2			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.4	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
0.86	1.07	8.4	86	1.2	6.0	87	71	55	26	77	78	54	61	57	57	50	1.5			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
0.92	1.06	9.3	87	1.2	6.1	126	97	57	25	72	72	52	59	100	100	70	1.6			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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
0.92	1.09	9.8	88	1.2	6.1	284	89	59	24	73	78	55	62	174	174	80	1.6			

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Sample ID: 16

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	pH$	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		pH$	0	0	0	Note: 3 Note: $

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	1.11	9.4	90	0.9	6.5	115	80	60	26	56	101	63	70	55	55	53	1.3			

Sample ID: 17

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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	1.10	10.1	90	1.0	6.4	133	78	62	25	58	113	72	79	71	71	52	1.1			

Sample ID: 18

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	89	1.1	6.2	74	105	50	34	115	30	25	32	69	69	36	2.8			

Sample ID: 19

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.08	1.10	9.8	90	1.0	6.2	70	100	50	35	107	26	23	30	67	67	43	2.5			

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Sample ID: 28

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.49	1.04	9.3	81	1.8	5.7	163	125	50	24	87	53	39	46	52	52	53	1.2			

Sample ID: 29

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	1.01	10.9	87	1.4	6.2	147	144	54	27	106	81	56	63	59	59	60	1.9			

Sample ID: 30

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.84	0.98	9.3	76	2.2	5.9	241	85	56	16	74	63	45	52	62	62	66	0.5			

Sample ID: 31

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.76	1.01	9.4	80	1.9	5.9	279	103	62	13	64	67	47	54	62	62	74	0.4			

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Sample ID: 32

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.44	0.99	9.3	81	1.8	5.9	216	110	53	22	92	52	38	45	65	65	72	1.6			

Sample ID: 33

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.6	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.68	0.94	10.7	84	1.7	6.0	176	100	60	20	81	57	41	48	76	76	83	1.1			

Sample ID: 34

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.68	0.93	12.3	87	1.6	6.4	179	78	66	17	73	30	22	29	53	53	108	0.7			

Sample ID: 35

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.60	0.95	9.7	84	1.6	6.3	191	81	58	21	77	33	25	32	46	46	102	0.6			

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Sample ID: 36

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.84	0.89	8.8	77	2.0	5.9	190	76	51	22	78	26	23	30	50	50	108	0.6			

Sample ID: 37

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
3.10	0.84	8.8	77	2.0	5.8	186	85	52	20	79	25	22	29	53	53	109	0.7			

Sample ID: 38

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	0-20	0	0	10	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.76	0.88	8.9	78	2.0	5.9	231	85	53	20	75	28	24	31	52	52	112	0.6			

Sample ID: 39

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.87	1.03	9.4	89	1.0	6.6	142	89	53	32	79	31	19	26	72	72	63	1.6			

Dawson Pugh

Sample ID: 40

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0-20	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
2.44	0.97	9.7	85	1.5	6.3	93	79	52	29	87	31	24	31	66	66	71	1.4			

Sample ID: 41

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.67	1.02	10.3	93	0.7	6.7	111	95	56	33	96	43	25	32	93	93	73	2.2			

Sample ID: 42

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.61	0.99	10.1	88	1.2	6.3	114	103	53	30	90	32	25	32	74	74	76	1.7			

Sample ID: 43

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	$pH	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	0	0		pH$	0	0	0	Note: 3 Note: $

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
1.37	1.04	9.5	91	0.9	6.6	117	106	51	34	82	30	19	26	88	88	75	2.4			

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Sample ID: 44	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.9	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
1.87	1.05	11.2	85	1.7	5.8	106	97	54	27	124	57	41	48	164	164	94	2.1			

Sample ID: 45	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.80	0.97	10.7	87	1.4	6.2	130	75	62	22	79	64	45	52	187	187	124	1.1			

Sample ID: 46	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.8	50-70	0	0	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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
2.01	0.93	9.6	81	1.8	5.9	105	92	51	26	94	44	33	40	120	120	86	1.5			

Sample ID: 47	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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
1.25	0.97	8.3	86	1.2	6.1	137	70	53	28	80	40	32	39	75	75	92	1.4			

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Sample ID: 48

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.55	0.87	8.2	83	1.4	6.1	155	70	53	25	74	41	32	39	69	69	105	0.7			

Sample ID: 49

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.14	0.94	8.4	87	1.1	6.4	122	74	53	30	64	45	31	38	77	77	86	0.9			

Sample ID: 50

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.55	0.96	8.7	84	1.4	6.1	133	65	54	26	86	50	37	44	78	78	94	0.9			

Sample ID: 51

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.55	0.93	9.9	86	1.4	6.1	127	89	53	29	85	42	32	39	71	71	72	1.0			

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Sample ID: 52

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.80	1.01	10.2	85	1.5	6.3	132	75	55	27	90	50	35	42	82	82	89	1.0			

Sample ID: 53

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.0	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.29	0.93	10.4	82	1.9	5.8	132	63	62	16	82	45	34	41	60	60	84	1.2			

Sample ID: 54

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.4	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.37	0.96	8.4	73	2.3	5.6	148	79	51	18	77	61	44	51	70	70	80	0.6			

Dawson Pugh

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 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.*

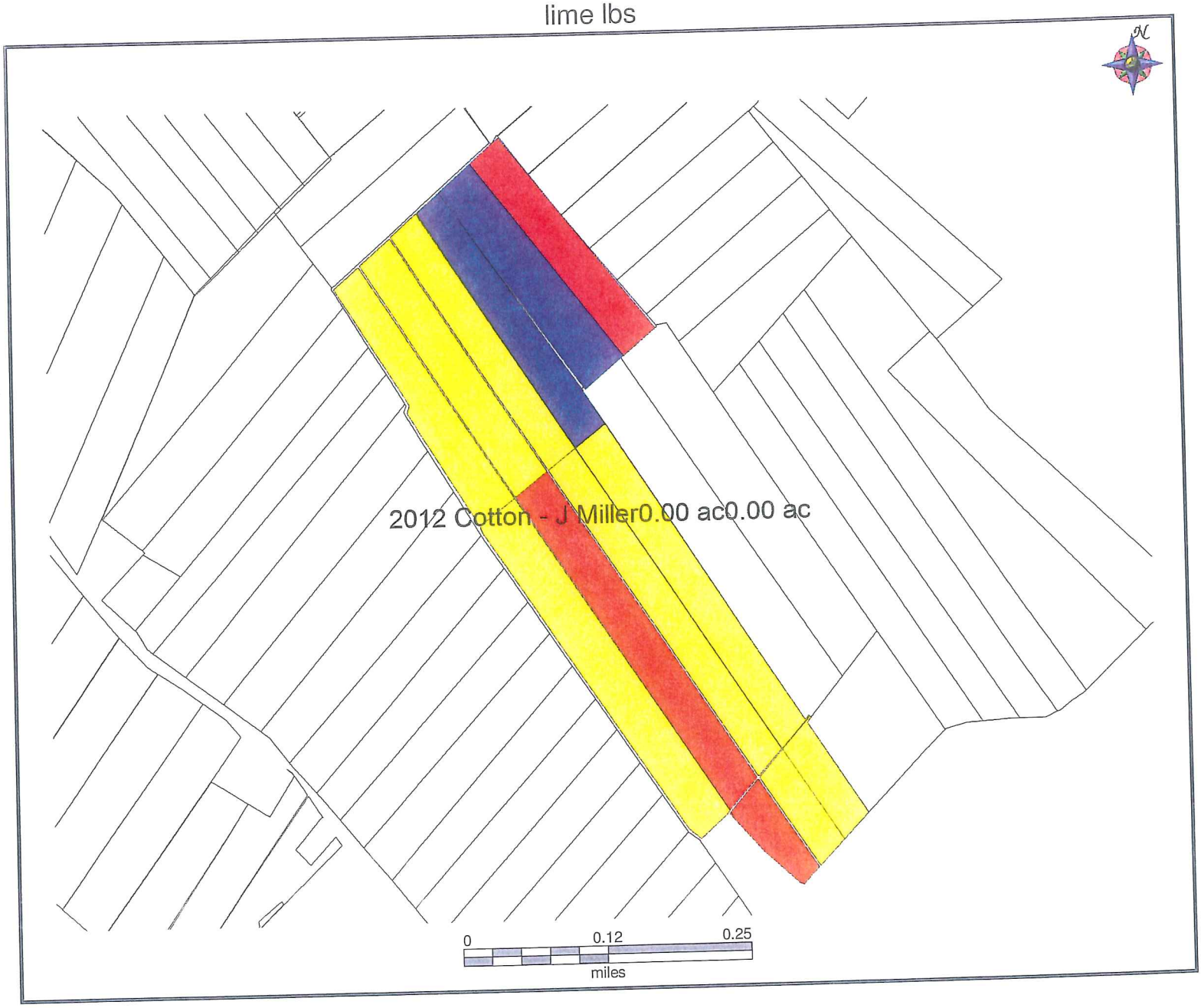
Test Results

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* for more information.

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

J Miller - 2012 Cotton: Application
lime lbs



Client: Pugh, Dawson
Farm: White Plains
Field: J Miller
Crop: 2012 Cotton
Name: J Miller - Application
Type: Application
Date: 3/2/2012
lime lbs: 45.388 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

J Miller
Sample ID

Client: Pugh, Dawson
Farm: White Plains
Field: J Miller
Name: zone map
Min: 20
Max: 29
Avg: 24

- 26 - 29
- 25 - 25
- 24 - 24
- 23 - 23
- 22 - 22
- 21 - 21
- 20 - 20

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY12-SL027734

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde J. MILLER

Farm: WHITE PLAINS

Links to Helpful Information

Sampled: Received: 12/29/2011 Completed: 02/22/2012

Sample ID: 20	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.5	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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
2.01	1.10	8.2	83	1.4	6.0	90	59	59	20	55	52	38	45	45	45	60	0.4			

Sample ID: 21	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.5	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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
1.87	1.04	8.6	86	1.2	5.9	102	66	58	24	104	51	38	45	68	68	56	1.4			

Sample ID: 22	Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
			Nutrients (lb/acre)									
Lime History:	1 - Cotton	0.4	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
	2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

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
1.67	1.07	8.0	85	1.2	6.0	104	59	59	23	75	53	39	46	66	66	49	0.9			

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*

Dawson Pugh

Sample ID: 23

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 - Cotton	0.0	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.80	1.07	8.9	89	1.0	6.3	105	74	62	24	64	73	49	56	57	57	52	0.8			

Sample ID: 24

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 - Cotton	0.3	50-70	0	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.49	1.09	8.3	88	1.0	6.0	116	68	58	26	99	67	47	54	79	79	68	1.6			

Sample ID: 25

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 - Cotton	0.7	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
1.61	1.07	9.1	86	1.3	5.7	106	87	53	28	131	60	43	50	117	117	86	2.7			

Sample ID: 26

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 - Cotton	0.9	50-70	0	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0-20	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.22	1.07	8.3	81	1.6	5.7	95	81	52	23	90	50	37	44	45	45	45	1.2			

Dawson Pugh

Sample ID: 27

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 - Cotton	0.4	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
2.08	1.06	9.3	86	1.3	6.0	98	100	54	26	117	65	46	53	52	52	48	2.0			

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 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

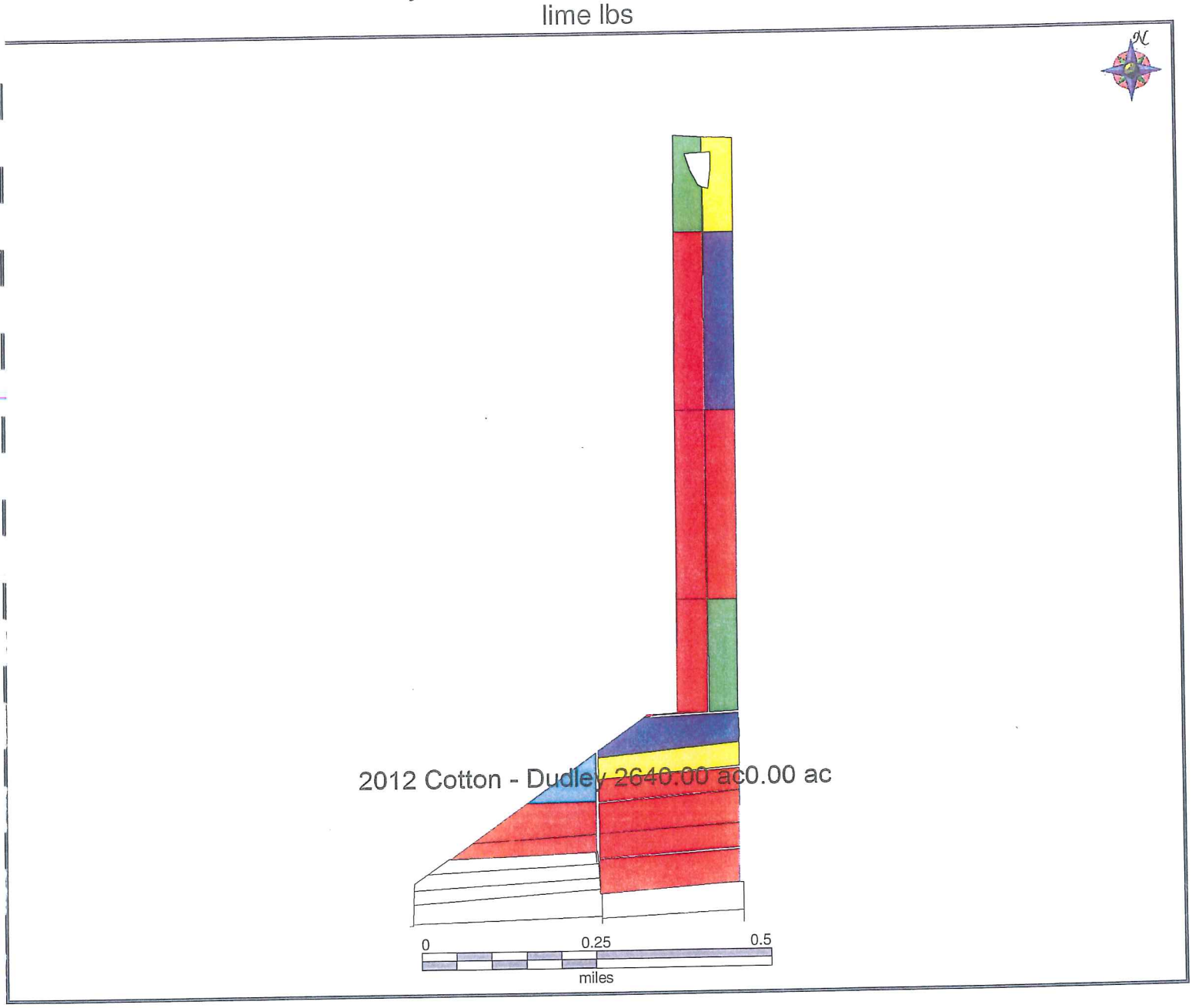
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Dudley 264 - 2012 Cotton: Application

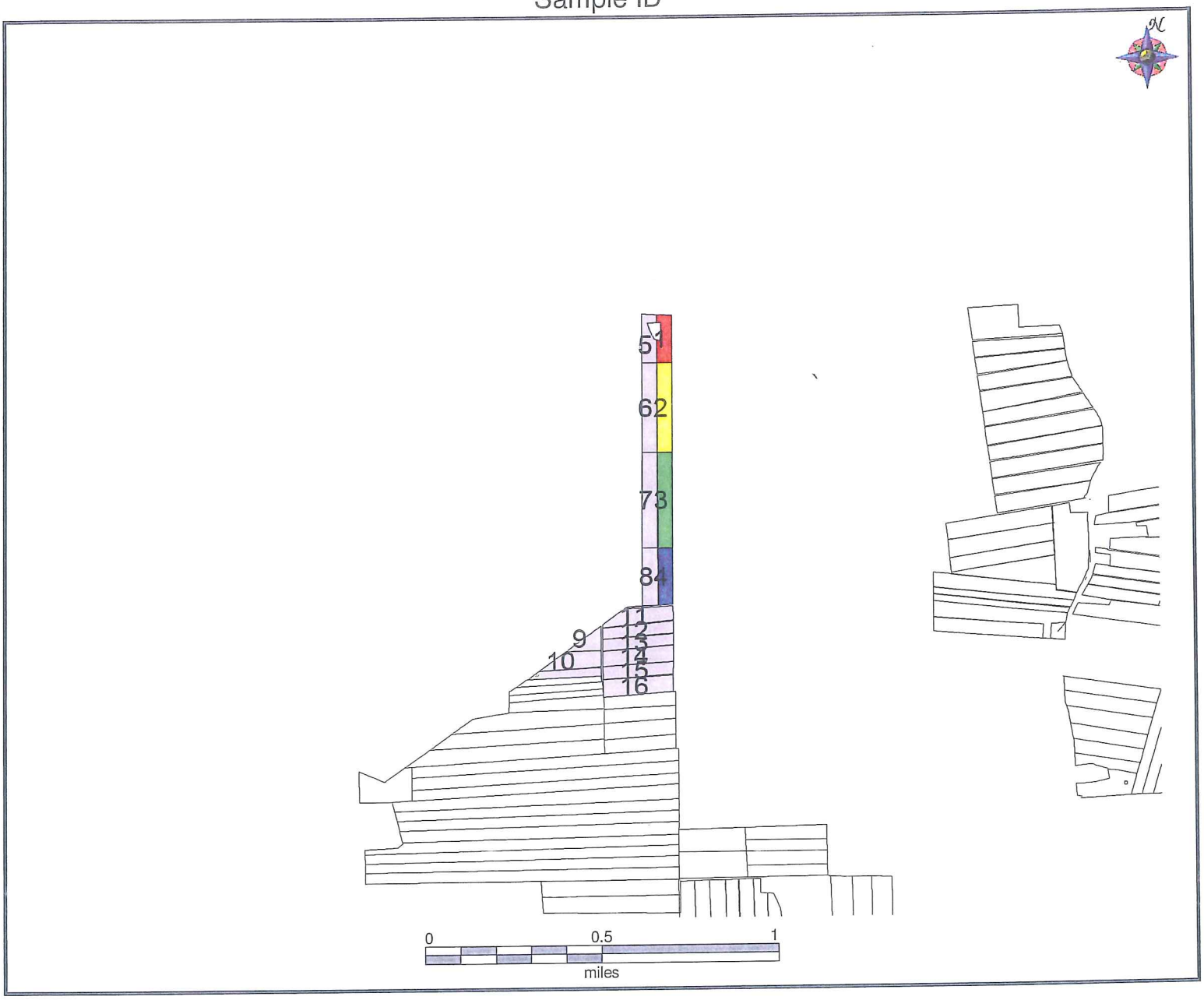
lime lbs



Client: Pugh, Dawson
Farm: Dudley 264
Field: Dudley 264
Crop: 2012 Cotton
Name: Dudley 264 - Application
Type: Application
Date: 3/2/2012
lime lbs: 57.296 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 6000.00 lbs/ac
- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Dudley 264
Sample ID



Client: Pugh, Dawson
Farm: Dudley 264
Field: Dudley 264
Name: zone map
Min: 1
Max: 16
Avg: 7

4
3
2
1

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY12-SL027737

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: DUDLEY ~~364~~ 264

Links to Helpful Information

Sampled: Received: 12/29/2011 Completed: 02/22/2012

Sample ID: 1

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 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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: Organic

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
8.54	0.93	11.6	66	4.0	5.3	101	157	47	11	81	51	51	58	95	158	73	0.3			

Sample ID: 2

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 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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: Organic

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
6.58	0.84	11.2	67	3.7	5.3	81	144	46	14	98	44	47	54	55	91	56	0.4			

Sample ID: 3

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 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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: Organic

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
5.69	0.86	10.7	70	3.2	5.4	60	121	48	16	99	36	41	48	61	101	70	0.4			

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*

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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: Organic

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
6.20	0.81	9.5	65	3.3	5.3	51	96	45	15	143	36	42	49	74	123	84	0.4			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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: Organic

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
7.96	0.89	11.4	68	3.6	5.4	130	169	47	14	98	53	51	58	97	161	72	0.4			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.5	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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-Organic

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
5.09	0.85	9.2	65	3.2	5.3	96	134	44	14	105	54	50	57	51	64	61	0.4			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

Nutrients (lb/acre)

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: Organic

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
5.85	0.80	10.7	70	3.2	5.4	66	138	48	16	113	45	46	53	68	113	75	0.4			

Dawson Pugh

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	0	0		0	0	0	0	Note: 3

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: Organic

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
6.58	0.78	9.3	56	4.1	5.0	67	110	37	13	160	48	54	61	68	113	79	0.4			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	20-40	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	0-20	0		0	0	0	0	Note: 3

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: Organic

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
6.20	0.75	8.7	59	3.6	5.2	31	85	42	12	92	40	46	53	36	60	67	0.3			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	30-50	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	0-20	0		0	0	0	0	Note: 3

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: Organic

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
6.20	0.71	10.4	66	3.5	5.3	30	82	51	12	89	42	46	53	50	83	61	0.3			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0-20	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0-20	0	0		0	0	0	0	Note: 3

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: Organic

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
5.53	0.75	11.3	73	3.1	5.5	39	97	58	11	118	36	39	46	50	83	59	0.4			

Dawson Pugh

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	20-40	0-20	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	20-40	0-20	0		0	0	0	0	Note: 3

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:** Organic

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
6.38	0.71	10.8	66	3.7	5.5	34	79	53	10	104	30	36	43	57	95	66	0.4			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	30-50	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	0-20	0		0	0	0	0	Note: 3

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:** Organic

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
6.20	0.69	9.5	65	3.3	5.5	30	75	52	9	88	29	35	42	40	66	51	0.3			

Sample ID: 14

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	30-50	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	0	0		0	0	0	0	Note: 3

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:** Organic

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
5.69	0.75	9.6	65	3.4	5.5	28	93	49	11	89	31	36	43	46	76	53	0.4			

Sample ID: 15

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.3	50-70	50-70	0	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	50-70	0	0		0	0	0	0	Note: 3

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-Organic

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
5.23	0.72	8.4	61	3.3	5.4	32	92	44	11	89	30	36	43	58	73	48	0.3			

Dawson Pugh

Sample ID: 16

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 - Cotton	0.0	50-70	30-50	10-30	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	30-50	10-30	0		0	0	0	0	Note: 3

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: Organic

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
6.20	0.68	9.3	63	3.4	5.3	29	68	48	12	103	30	39	46	64	106	50	0.3			

Dawson Pugh

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 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

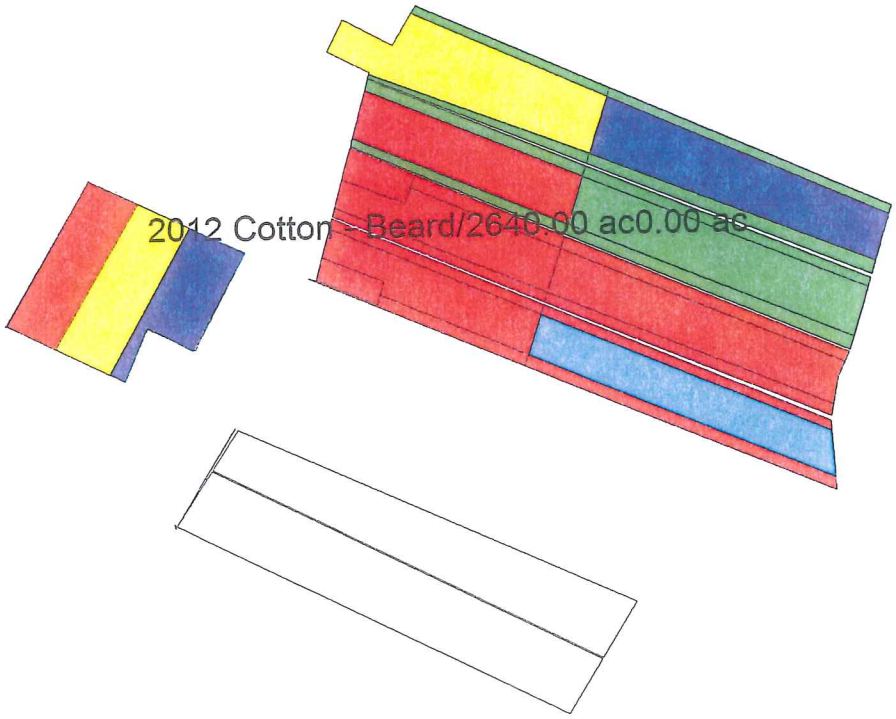
The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility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

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

Beard/264 - 2012 Cotton: Application

lime lbs

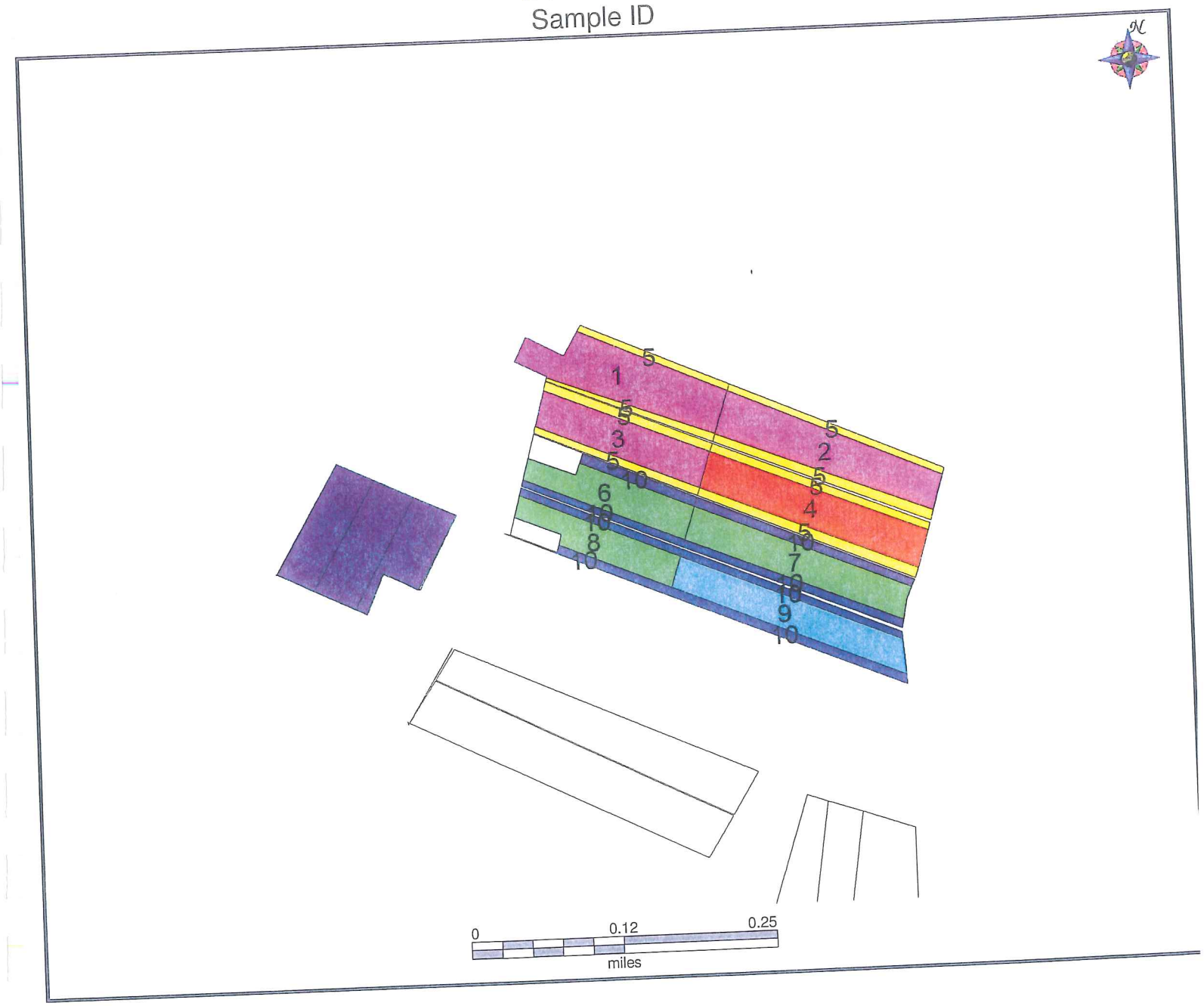


0 0.12 0.25
miles

Client: Pugh, Dawson
Farm: Beard/264/Selby
Field: Beard/264
Crop: 2012 Cotton
Name: Beard/264 - Application
Type: Application
Date: 3/2/2012
lime lbs: 43.710 tons
Unit Cost: $0.00/ton
Product Cost: $0.00

- 6000.00 lbs/ac
- 4500.00 lbs/ac
- 3000.00 lbs/ac
- 1500.00 lbs/ac
- 0.00 lbs/ac

Beard/264
Sample ID



Client: Pugh, Dawson
Farm: Beard/264/Selby
Field: Beard/264
Name: zone map
Min: 1
Max: 13
Avg: 7

- 11 - 13
- 10 - 10
- 9 - 9
- 6 - 8
- 5 - 5
- 4 - 4
- 1 - 3

NCDA&CS Agronomic Division Phone: (919) 733-2655 Website: www.ncagr.gov/agronomi/ Report No. FY12-SL027732

Predictive

Soil Report

Mehlich-3 Extraction

Client: Dawson Pugh
3159 Nebraska Rd
Engelhard, NC 27824

Advisor:

County: Hyde

Farm: beard 264

Links to Helpful Information

Sampled: Received: 12/29/2011 Completed: 02/22/2012

Sample ID: 1

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	40-60	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	30-50	$		0	0	0	0	Note: 3 Note: $

Soil Class: Mineral-Organic

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

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
4.81	1.04	6.1	49	3.1	5.3	107	53	38	7	77	47	46	53	79	99	57	0.2			

Sample ID: 2

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	2.0	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

Soil Class: Mineral

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

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
2.68	1.08	6.9	59	2.8	5.2	127	57	46	9	94	66	47	54	53	53	46	0.3			

Sample ID: 3

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	30-50	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	30-50	$		0	0	0	0	Note: 3 Note: $

Soil Class: Mineral-Organic

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

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
3.98	1.02	6.8	60	2.7	5.5	141	54	51	6	80	47	46	53	124	155	78	0.2			

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*

North Carolina
Tobacco Trust Fund Commission

Dawson Pugh

Sample ID: 4

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.9	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Soil Class: Mineral-Organic

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

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
3.77	1.10	7.4	57	3.2	5.1	126	62	44	8	97	60	54	61	69	86	63	0.3			

Sample ID: 5

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.8	50-70	0	20-40	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	10-30	0		0	0	0	0	Note: 3

Soil Class: Mineral-Organic

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

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
3.77	1.13	7.1	58	3.0	5.1	109	63	44	10	95	54	50	57	49	61	57	0.3			

Sample ID: 6

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

Soil Class: Mineral-Organic

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

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
4.44	1.09	6.3	57	2.7	5.5	93	45	46	8	76	42	43	50	88	110	62	0.2			

Sample ID: 7

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	30-50	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	20-40	0		0	0	0	0	Note: 3

Soil Class: Mineral-Organic

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

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
3.87	1.10	8.8	70	2.6	5.5	124	58	56	11	75	61	54	61	100	125	108	0.3			

Dawson Pugh

Sample ID: 8

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	40-60	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	30-50	0		0	0	0	0	Note: 3

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-Organic

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
5.09	1.09	7.7	65	2.7	5.7	102	48	53	9	68	45	42	49	109	136	73	0.2			

Sample ID: 9

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.7	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

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
3.37	1.11	8.8	70	2.6	5.4	121	45	56	12	88	51	38	45	113	113	89	0.2			

Sample ID: 10

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0	50-70	0	0	0	0	0	1.0	Note: 3
2 - Corn Grain	0.0	120-160	0	40-60	0		0	0	0	0	Note: 3

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-Organic

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
4.56	1.08	8.0	63	3.0	5.4	92	42	51	9	86	44	46	53	63	79	71	0.3			

Sample ID: 11

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	1.9	50-70	0	110-130	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	100-120	$		0	0	0	0	Note: 3 Note: $

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
3.37	1.06	5.6	48	2.9	5.4	158	17	42	6	99	46	35	42	80	80	91	0.4			

Dawson Pugh

Sample ID: 12

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.5	50-70	0	100-120	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0	90-110	$		0	0	0	0	Note: 3 Note: $

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

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
4.32	1.00	5.5	38	3.4	5.3	93	19	32	5	109	31	36	43	40	50	68	0.4			

Sample ID: 13

Lime History:

Recommendations: Crop	Lime (tons/acre)	N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
		Nutrients (lb/acre)									
1 - Cotton	0.0	50-70	0-20	110-130	$	0	0	0	0	1.0	Note: 3 Note: $
2 - Corn Grain	0.0	120-160	0-20	100-120	$		0	0	0	0	Note: 3 Note: $

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

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
4.20	1.01	5.0	44	2.8	5.4	64	17	38	4	94	28	36	43	27	34	98	0.3			

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 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* for more information.

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