



Predictive

## Soil Report

Mehlich-3 Extraction

**Client:** Horticultural Crops Research Station /  
Clinton  
2450 Faison Hwy  
Clinton, NC 28328

**Advisor:**

Sampled County : Sampson

**Client ID:** 403047**Advisor ID:**

**Sampled:** 11/19/2019 **Received:** 11/19/2019 **Completed:** 12/16/2019 **Farm:** Resstation

[Links to Helpful Information](#)
**Agronomist's Comments:**

Blueberry hardly ever needs lime; no lime should be applied unless advised by an experienced consultant. Soil pH in the 4.0 to 5.0 range is preferable. If you received a lime recommendation on the report, it is due to the second crop code selection. Our recommendation program provides a lime recommendation for the crop with the highest target pH. This lime recommendation when it exists will always appear next to the first crop. If there is confusion about this, please contact us. Also read Note 18 that can be accessed by a hyperlink found on the report.

Sample ID: A01	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Sweetpotato	0.0	60-90	0	10	0	0	0	0	0	0.5	<a href="#">Note: 6</a>
	2 - Vegetables, other	0.0	80-100	0	70	0	0	0	0	0	0	

Test Results [units - W/V in g/cm<sup>3</sup>; CEC and Na in meq/100 cm<sup>3</sup>; NO<sub>3</sub>-N in mg/dm<sup>3</sup>]:

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 <sub>3</sub> -N
0.27	1.35	2.8	78	0.6	5.9	223	69	50	16	28	89	70	63	90	90	71	0.1	4		

Sample ID: A06	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Corn, grain	0.0	120 - 160	0	20	0	0	0	0	0	0	<a href="#">Note: 3</a>
	2 - Vegetables, other	0.0	80-100	0	90	0	0	0	0	0	0	

Test Results [units - W/V in g/cm<sup>3</sup>; CEC and Na in meq/100 cm<sup>3</sup>; NO<sub>3</sub>-N in mg/dm<sup>3</sup>]:

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 <sub>3</sub> -N
0.32	1.37	3.1	83	0.5	6.2	283	62	55	19	26	100	74	67	132	132	138	0.1	3		

Sample ID: A10	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Corn, grain	0.3	120 - 160	0	70	0	25	0	0	0	0	<a href="#">Note: 3</a>
	2 - Vegetables, other	0.0	80-100	0	150	0	25	0	0	0	0	

Test Results [units - W/V in g/cm<sup>3</sup>; CEC and Na in meq/100 cm<sup>3</sup>; NO<sub>3</sub>-N in mg/dm<sup>3</sup>]:

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 <sub>3</sub> -N
0.32	1.43	2.5	70	0.8	5.6	269	36	49	13	23	99	76	69	144	144	89	0.1	4		



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: A11	Recommendations:		Lime		Nutrients (lb/acre)											More Information				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Corn, grain	0.0	120 - 160	0	60	0	25	0	0	0	0								<a href="#">Note: 3</a>
	2 - Vegetables, other	0.0	80-100	0	130	0	25	0	0	0	0								<a href="#">Note: 6</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.18	1.34	1.8	71	0.5	5.8	150	41	45	15	18	54	49	42	98	98	70	0.1	6		
Sample ID: A12	Recommendations:		Lime		Nutrients (lb/acre)											More Information				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.0	80-100	0	110	0	20	0	0	0	0								<a href="#">Note: 6</a>
0.40 tons/acre; 3/2019	2 - Soybean	0.0	0	0	40	0	20	0	0	0	0								<a href="#">Note: 3</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.22	1.29	2.7	82	0.5	6.3	170	53	50	23	20	65	45	45	118	118	50	0.1	4		
Sample ID: B01	Recommendations:		Lime		Nutrients (lb/acre)											More Information				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.3	80-100	0	160	0	25	0	0	0	0								<a href="#">Note: 6</a>
	2 - Soybean	0.0	0	0	80	0	25	0	0	0	0								<a href="#">Note: 3</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.22	1.39	2.2	71	0.6	5.6	160	30	46	17	19	61	47	47	128	128	70	0.1	5		
Sample ID: B02	Recommendations:		Lime		Nutrients (lb/acre)											More Information				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.0	80-100	10	120	0	25	0	0	0	0								<a href="#">Note: 6</a>
0.30 tons/acre; 3/2019	2 - Soybean	0.0	0	0	50	0	25	0	0	0	0								<a href="#">Note: 3</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.18	1.40	2.1	79	0.4	6.1	113	45	46	23	24	58	44	44	69	69	86	0.1	5		

Sample ID: B03	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.0	80-100	0	120	0	25	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 6</a>	
	2 - Soybean	0.0	0	0	50	0	25	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>		
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.27	1.33	2.4	75	0.6	5.8	151	47	46	18	25	75	55	55	102	102	62	0.1	4		
Sample ID: B04	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.0	80-100	20	150	0	25	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 6</a>	
0.50 tons/acre; 3/2019	2 - Soybean	0.0	0	0	70	0	25	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>		
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.13	1.43	2.3	78	0.5	6.0	107	33	49	21	21	52	41	41	104	104	53	0.1	4		
Sample ID: B05	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.3	80-100	0	140	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 6</a>	
	2 - Soybean	0.0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>		
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.22	1.40	2.1	73	0.6	5.7	118	39	44	20	47	73	54	54	75	75	115	0.1	5		
Sample ID: B06	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Vegetables, other	0.0	80-100	0	130	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 6</a>	
	2 - Soybean	0.0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>		
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.27	1.44	2.4	73	0.6	5.8	152	42	46	18	44	75	55	55	112	112	61	0.1	4		

NCDA&CS Agronomic Division				Phone: (919) 733-2655				Website: www.ncagr.gov/agronomi/				Report No.				FY20-SL017723					
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Sample ID: B07		Recommendations:		Lime		Nutrients (lb/acre)										More Information					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		20		150		0		0		0		0		0	
		2 - Soybean		0.0		0		0		70		0		0		0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N	
0.41	1.40	2.5	74	0.6	5.8	103	35	47	21	44	38	33	33	41	41	27	0.1	4			
Sample ID: C01		Recommendations:		Lime		Nutrients (lb/acre)										More Information					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn		Cu		B	
Lime History:		1 - Blueberry, M		0.0		30-60		0		0		0		0		0		0		0	
		2 - Blueberry, M		0.0		30-60		0		0		0		0		0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N	
1.31	1.07	6.4	40	3.8	4.2	152	41	26	11	46	30			116	116	57	0.1	2			
Sample ID: E04		Recommendations:		Lime		Nutrients (lb/acre)										More Information					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn		Cu		B	
Lime History:		1 - Grape, M		0.0		Note 18		0		80		0		0		0		0		0.5	
0.60 tons/acre; 3/2019		2 - Grape, M		0.0		Note 18		0		80		0		0		0		0		0.5	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N	
0.32	1.29	4.7	86	0.7	6.3	155	33	57	25	43	79	60	60	308	308	47	0.2	4			
Sample ID: G01		Recommendations:		Lime		Nutrients (lb/acre)										More Information					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		70		0		0		0		0		0	
0.30 tons/acre; 3/2019		2 - Soybean		0.0		0		0		10		0		0		0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N	
0.56	1.30	3.4	80	0.7	6.0	183	70	52	18	43	120	82	82	102	102	79	0.1	3			

Sample ID: G04	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Vegetables, other	0.0	80-100	0	160	0	0	0	0	0	0	<a href="#">Note: 6</a> <a href="#">Note: 3</a>
	2 - Soybean	0.0	0	0	80	0	0	0	0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.18	1.35	2.0	76	0.5	6.1	147	30	47	22	37	59	44	44	76	76	31	0.1	5		

Sample ID: G06	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Soybean	0.4	0	0	90	25	0	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: 6</a> <a href="#">Note: \$</a>
	2 - Vegetables, other	0.0	80-100	10	180	\$	0	0	0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.18	1.36	1.8	62	0.7	5.3	111	23	42	13	31	42	35	35	29	29	35	0.1	6		

Sample ID: G07	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Soybean	0.4	0	0	90	25	0	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: 6</a> <a href="#">Note: \$</a>
	2 - Vegetables, other	0.0	80-100	0	180	\$	0	0	0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.18	1.31	1.8	61	0.7	5.3	121	25	43	11	26	42	35	35	52	52	33	0.1	6		

Sample ID: H02	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Soybean	0.3	0	0	110	0	0	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: 6</a>
	2 - Sweetpotato	0.0	60-90	0	180	0	0	0	0	0	0.0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.18	1.51	2.1	70	0.6	5.7	217	17	49	17	26	108	75	82	189	189	131	0.1	5		

Sample ID: M01	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Soybean	0.5	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>
	2 - Sweetpotato	0.0	60-90	0	160	0	0	0	0	0	0	0	0	0	0	0	0	0.0	<a href="#">Note: 6</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.32	1.40	2.2	59	0.9	5.3	193	22	41	13	28	76	56	63	74	74	56	0.1	5		
Sample ID: M02	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Soybean	0.0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>
0.30 tons/acre; 3/2019	2 - Sweetpotato	0.0	60-90	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0.0	<a href="#">Note: 6</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.41	1.39	2.7	72	0.8	5.8	234	59	41	19	34	90	64	71	98	98	71	0.1	4		
Sample ID: M03	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Soybean	0.0	0	0	40	0	25	0	0	0	0	0	0	0	0	0	0	0	<a href="#">Note: 3</a>
0.30 tons/acre; 3/2019	2 - Sweetpotato	0.0	60-90	0	60	0	25	0	0	0	0	0	25	0	0	0	0	0.0	<a href="#">Note: 6</a>	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.27	1.33	2.1	68	0.7	5.7	167	49	38	18	24	70	52	59	99	99	51	0.1	5		
Sample ID: G08	Recommendations:		Lime		Nutrients (lb/acre)												More Information			
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B									
	Lime History:	1 - Strawberry, E	0.3	30-60	0	110	25	25	0	0	0	1.0	<a href="#">Note: 18</a>							
	2 - Soybean	0.0	0	0	100	\$	25	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: \$</a>								
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N
0.18	1.40	1.7	63	0.6	5.4	136	22	43	14	17	57	44	44	136	136	49	0.1	6		

Sample ID: G09	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History: 0.40 tons/acre; 3/2019	1 - Soybean	0.0	0	0	60	0	25	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: 6</a>
	2 - Vegetables, other	0.0	80-100	0	140	0	25	0	0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.22	1.38	2.1	73	0.6	6.0	160	39	42	22	14	88	63	63	84	84	42	0.1	5		

Sample ID: G10	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Soybean	0.3	0	0	110	25	25	0	0	0	0	<a href="#">Note: 3</a> <a href="#">Note: 6</a> <a href="#">Note: \$</a>
	2 - Vegetables, other	0.0	80-100	0	200	\$	25	0	0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.22	1.42	1.6	60	0.6	5.4	165	16	41	14	20	103	72	72	86	86	45	0.1	6		

Sample ID: G11	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Hardwood, M	0.0	80-120	0	30	0			0	0	0	<a href="#">Note: 11</a> <a href="#">Note: 11</a>
	2 - Hardwood, M	0.0	80-120	0	30	0			0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.13	1.32	1.7	62	0.6	5.5	76	24	40	16	26	31			40	40	27	0.1	6		

Sample ID: G12	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Hardwood, M	0.0	80-120	0	10	0			0	0	0	<a href="#">Note: 11</a> <a href="#">Note: 11</a>
	2 - Hardwood, M	0.0	80-120	0	10	0			0	0	0	

Test Results [units - W/V in g/cm <sup>3</sup> ; CEC and Na in meq/100 cm <sup>3</sup> ; NO <sub>3</sub> -N in mg/dm <sup>3</sup> ]:																			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 <sub>3</sub> -N
0.18	1.30	2.3	74	0.6	6.0	97	35	48	19	30	43			69	69	28	0.1	4		

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Sample ID: M05		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Vegetables, other		0.0		80-100		0		110		0		0				0		0		0		0																	
Lime History: 0.30 tons/acre; 3/2019		2 - Soybean		0.0		0		0		40		0		0		0		0		0		0																			
		Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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		NO3-N	
0.60		1.33		3.0		76		0.7		6.0		179		51		51		17		28		89		63		63		111		111		74		0.1		3					
Sample ID: M06		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Vegetables, other		0.0		80-100		30		150		0		25				0		0		0		0																	
Lime History: 0.50 tons/acre; 3/2019		2 - Soybean		0.0		0		0		70		0		25		0		0		0		0																			
		Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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		NO3-N	
0.22		1.38		1.9		73		0.5		6.0		96		33		44		20		23		52		41		41		57		57		37		0.1		5					
Sample ID: M07		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Vegetables, other		0.0		80-100		0		190		0		25				0		0		0		0																	
Lime History: 0.40 tons/acre; 3/2019		2 - Soybean		0.0		0		0		100		0		25		0		0		0		0																			
		Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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		NO3-N	
0.32		1.40		2.2		73		0.6		6.1		183		21		46		22		23		67		49		49		76		76		59		0.1		5					
Sample ID: M08		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Vegetables, other		0.3		80-100		30		130		0		25				0		0		0		0																	
Lime History:		2 - Soybean		0.0		0		0		50		0		25		0		0		0		0																			
		Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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		NO3-N	
0.18		1.39		1.8		66		0.6		5.6		99		44		37		16		23		45		37		37		45		45		40		0.1		6					



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Sample ID: M09		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.3		80-100		0		110		0		0				0		0		0	
		2 - Soybean		0.0		0		0		40		0		0				0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N			
0.18	1.32	2.0	69	0.6	5.7	125	52	41	15	37	69	51	51	72	72	68	0.1	5					
Sample ID: M11		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.3		80-100		10		120		0		0				0		0		0	
		2 - Soybean		0.0		0		0		50		0		0				0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N			
0.22	1.37	1.9	68	0.6	5.6	110	47	39	17	39	50	40	40	50	50	43	0.1	5					
Sample ID: M12		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		40		0		0				0		0		0	
		2 - Soybean		0.0		0		0		0		0		0				0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N			
0.27	1.25	2.7	79	0.6	6.0	122	87	46	17	32	54	42	42	46	46	67	0.1	4					
Sample ID: M14		Recommendations:		Lime		Nutrients (lb/acre)										More Information <a href="#">Note: 6</a> <a href="#">Note: 3</a>							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.4		80-100		0		170		0		25				0		0		0	
		2 - Soybean		0.0		0		0		80		0		25				0		0		0	
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N			
0.32	1.37	1.8	59	0.7	5.3	135	28	35	17	21	52	41	41	35	35	45	0.1	6					

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Sample ID: M15		Recommendations:		Lime		Nutrients (lb/acre)										More Information									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B	
		Lime History:		1 - Vegetables, other		0.0		80-100		0		0		0				0		0		0		0	
		2 - Soybean		0.0		0		0		0		0		0		0		0		0		<a href="#">Note: 6</a>			
																				<a href="#">Note: 3</a>					
Test Results [units - W/V in g/cm³; CEC and Na in meq/100 cm³; NO3-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	NO3-N					
1.31	1.21	5.6	82	1.0	6.0	241	166	52	16	40	87	62	62	69	69	90	0.1	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 dolomitic 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](http://ncagr.gov/agronomi/pubs.htm).

Recommendations **for small areas, such as home lawns/gardens**, are listed in units of lb/1000 sq ft. If you cannot find the exact fertilizer grade recommended on the report, visit [www.ncagr.gov/agronomi/obpart4.htm](http://www.ncagr.gov/agronomi/obpart4.htm) 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, NO3-N (not routinely available)] indicate levels of plant nutrients or other fertility measurement. Visit [www.ncagr.gov/agronomi/uyrst.htm](http://www.ncagr.gov/agronomi/uyrst.htm)

**Report Abbreviations**

<b>Ac</b>	exchangeable acidity
<b>B</b>	boron
<b>BS%</b>	% CEC occupied by basic cations
<b>Ca%</b>	% CEC occupied by calcium
<b>CEC</b>	cation exchange capacity
<b>Cu-I</b>	copper index
<b>ESP</b>	exchangeable sodium percent
<b>HM%</b>	percent humic matter
<b>K-I</b>	potassium index
<b>K2O</b>	potash
<b>Mg%</b>	% CEC occupied by magnesium
<b>MIN</b>	mineral soil class
<b>Mn</b>	manganese
<b>Mn-AI1</b>	Mn-availability index for crop 1
<b>Mn-AI2</b>	Mn-availability index for crop 2
<b>Mn-I</b>	manganese index
<b>M-O</b>	mineral-organic soil class
<b>N</b>	nitrogen
<b>Na</b>	sodium
<b>NO3-N</b>	nitrate nitrogen
<b>ORG</b>	organic soil class
<b>pH</b>	current soil pH
<b>P-I</b>	phosphorus index
<b>P2O5</b>	phosphate
<b>S-I</b>	sulfur index
<b>SS-I</b>	soluble salt index
<b>W/V</b>	weight per volume
<b>Zn-AI</b>	zinc availability index
<b>Zn-I</b>	zinc index