



Internal

Soil Report

Mehlich-3 Extraction

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

Advisor:[Links to Helpful Information](#)

Sampled County : Sampson

Client ID: 403047**Advisor ID:**

Sampled: 12/01/2018 Received: 02/07/2019 Completed: 02/12/2019 Farm: Resstation

Sample ID: N22	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.0	80-100	110	30	0	0	0	0	0	0										
Lime History:	2 - Corn, grain	0.0	120 - 160	20	0	0	0	0	0	0	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.36	1.24	4.8	79	1.0	5.9	52	100	49	20	46	38	33	40	28	28	57	0.1	2			
Sample ID: N25	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: \$ Note: 3				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.3	80-100	170	40	0	0	0	\$	0	0										
Lime History:	2 - Corn, grain	0.0	120 - 160	80	0	0	0	0	0	0	0	0	0	6	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.09	1.31	3.3	75	0.8	5.7	26	86	38	24	36	42	35	42	25	25	47	0.1	3			
Sample ID: N26	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.0	80-100	90	40	0	0	0	0	0	0										
Lime History:	2 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.18	1.38	2.8	75	0.7	5.8	62	88	40	19	28	54	42	49	28	28	73	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: N27	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information Note: 6 Note: 3								
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B									
Lime History: 0.40 tons/acre; 3/2018	1 - Vegetables, other	0.0	80-100	60	30	0	0	0	0	0	0									
	2 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0									
Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.32	1.39	3.4	79	0.7	5.9	76	93	47	18	28	45	37	44	38	38	54	0.1	3		
Sample ID: N28	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information Note: 6 Note: 3								
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B									
Lime History: 0.30 tons/acre; 3/2018	1 - Vegetables, other	0.3	80-100	40	20	0	0	0	0	0	0									
	2 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0									
Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
1.02	1.29	5.4	76	1.3	5.8	91	102	51	16	35	39	33	40	37	37	72	0.1	2		
Sample ID: N29	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information Note: 6 Note: 3								
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B									
Lime History:	1 - Vegetables, other	0.0	80-100	30	170	0	25	0	0	0	0									
	2 - Corn, grain	0.0	120 - 160	0	80	0	25	0	0	0	0									
Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.27	1.38	2.7	80	0.5	6.1	94	28	63	12	20	39	32	39	62	62	57	0.1	4		
Sample ID: N30	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information Note: 6 Note: 3								
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B									
Lime History:	1 - Vegetables, other	0.0	80-100	120	20	0	0	0	0	0	0									
	2 - Corn, grain	0.0	120 - 160	30	0	0	0	0	0	0	0									
Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.13	1.33	3.1	74	0.8	5.8	48	105	38	19	29	34	30	37	39	39	60	0.1	3		

Sample ID: N31	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Vegetables, other	0.0	80-100	60	30	0	0	0	0	0	0	Note: 6 Note: 3
	2 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:																			Soil Class: Mineral	
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.56	1.37	3.9	77	0.9	5.9	78	95	48	17	28	50	40	47	85	85	115	0.1	3		

Sample ID: N33	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Vegetables, other	0.0	80-100	100	20	0	0	0	0	0	0	Note: 6 Note: 3
	2 - Corn, grain	0.0	120 - 160	10	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:																			Soil Class: Mineral	
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.46	1.38	3.7	79	0.8	6.1	56	106	45	20	26	29	26	33	57	57	60	0.1	3		

Sample ID: N34	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Vegetables, other	0.3	80-100	110	40	0	0	0	0	0	0	Note: 6 Note: 3
	2 - Corn, grain	0.0	120 - 160	20	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:																			Soil Class: Mineral	
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.46	1.39	3.5	71	1.0	5.7	51	90	42	16	33	26	26	33	70	70	48	0.1	3		

Sample ID: 001	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History: 0.40 tons/acre; 3/2018	1 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	0	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:																			Soil Class: Mineral	
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.60	1.33	5.6	84	0.9	6.2	229	124	57	16	54	107	78	71	285	285	296	0.2	4		

NCDA&CS Agronomic Division				Phone: (919) 733-2655				Website: www.ncagr.gov/agronomi/				Report No.				FY19-SL023897					
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Sample ID: 002		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		0		0		0		0		0		0	
		2 - Vegetables, other		0.0		80-100		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	1.33	3.3	86	0.5	6.4	122	91	51	21	40	87	63	56	124	124	112	0.2	6			
Sample ID: 003		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		0		0		0		0		0		0	
0.50 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		40		30		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	1.33	3.5	83	0.6	6.3	87	98	48	21	49	89	66	59	116	116	136	0.2	6			
Sample ID: 004		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		0		0		0		0		0		0	
0.30 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		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	
0.46	1.34	4.6	83	0.8	6.2	179	124	51	19	54	96	71	64	166	166	124	0.2	4			
Sample ID: 005		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		0		0		0		0		0		0	
0.40 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		10		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	
0.22	1.32	3.8	85	0.6	6.4	116	127	48	20	45	92	66	59	86	86	81	0.2	5			

Sample ID: 006	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 6				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	0									
Lime History: 0.40 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	40	20	0	0	0	0	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	
0.22	1.34	3.9	85	0.6	6.4	89	104	51	21	41	92	67	60	66	66	96	0.2	5			
Sample ID: 007	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 6				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	0									
Lime History:	2 - Vegetables, other	0.0	80-100	80	10	0	0	0	0	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	1.37	3.7	77	0.8	6.0	67	114	44	17	42	66	57	50	58	58	67	0.2	5			
Sample ID: 008	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 6				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	0									
Lime History: 0.30 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	0	50	0	0	0	0	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	
0.22	1.38	3.6	87	0.5	6.5	134	82	53	22	31	112	77	70	77	77	93	0.1	3			
Sample ID: 009	Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 6				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Corn, grain	0.0	120 - 160	0	10	0	0	0	0	0	0	0									
Lime History: 0.50 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	0	60	0	0	0	0	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	1.37	3.7	85	0.6	6.4	148	76	53	21	27	123	85	78	83	83	89	0.1	3			

Sample ID: 010	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History: 0.30 tons/acre; 3/2018	1 - Corn, grain	0.0	120 - 160	30	0	0	0	pH\$	0	0	0	Note: 3 Note: \$ Note: 6 Note: \$
	2 - Vegetables, other	0.0	80-100	110	0	0	0	pH\$	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.27	1.35	4.5	89	0.5	6.6	50	122	53	22	32	69	49	42	53	53	62	0.1	2		

Sample ID: 011	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History: 0.40 tons/acre; 3/2018	1 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	50	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.36	1.37	4.7	84	0.8	6.4	84	134	50	20	41	102	72	65	81	81	99	0.2	4		

Sample ID: 012	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History: 0.50 tons/acre; 3/2018	1 - Corn, grain	0.0	120 - 160	0	20	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	0	80	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.36	1.38	3.5	76	0.8	6.0	142	65	48	18	44	110	83	76	80	80	77	0.2	6		

Sample ID: 013	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)									More Information
			N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B	
Lime History:	1 - Corn, grain	0.0	120 - 160	10	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	100	0	0	0	0	0	0	0	

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:												Soil Class: Mineral								
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.41	1.32	4.6	83	0.8	6.2	56	122	50	20	51	48	43	36	49	49	52	0.2	4		

NCDA&CS Agronomic Division				Phone: (919) 733-2655				Website: www.ncagr.gov/agronomi/								Report No.				FY19-SL023897					
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Sample ID: 014		Recommendations: Crop		Lime (tons/acre)		Nutrients (lb/acre)										More Information Note: 3 Note: 6									
						N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B	
						1 - Corn, grain		0.0		120 - 160		0		0				0		0		0		0	
Lime History: 0.30 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		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					
0.41	1.32	4.5	87	0.6	6.4	89	119	53	21	40	76	56	49	64	64	74	0.2	4							
Sample ID: 015		Recommendations: Crop		Lime (tons/acre)		Nutrients (lb/acre)										More Information Note: 3 Note: 6									
						N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B	
						1 - Corn, grain		0.0		120 - 160		0		0				0		0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		10		30		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					
0.46	1.33	4.1	79	0.8	6.1	114	97	51	16	41	67	56	49	74	74	69	0.2	5							
Sample ID: 016		Recommendations: Crop		Lime (tons/acre)		Nutrients (lb/acre)										More Information Note: 3 Note: 6									
						N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B	
						1 - Corn, grain		0.0		120 - 160		0		0				0		0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		60		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					
0.92	1.33	5.4	82	1.0	6.0	78	111	54	18	40	45	44	37	59	59	59	0.2	4							
Sample ID: 017		Recommendations: Crop		Lime (tons/acre)		Nutrients (lb/acre)										More Information Note: 3 Note: 6									
						N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B	
						1 - Corn, grain		0.0		120 - 160		30		0				0		0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		120		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					
0.51	1.31	5.2	81	1.0	6.0	48	135	48	20	34	40	41	34	44	44	60	0.1	2							

Sample ID: 018	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	0	0	25	0	0	0	0	0	0	0	0	0	0	Note: 3		
	2 - Vegetables, other	0.0	80-100	10	20	0	25	0	0	0	0	0	0	0	0	0	0	0	Note: 6		
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	1.33	4.7	81	0.9	6.0	116	101	54	16	25	50	47	40	56	56	62	0.1	2			
Sample ID: P08	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	10	0	25	0	0	0	0	0	0	0	0	0	0	0	Note: 3	
0.40 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	10	70	0	25	0	0	0	0	0	0	0	0	0	0	0	Note: 6		
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	
0.46	1.37	3.3	74	0.9	5.8	115	72	45	18	23	60	53	46	49	49	38	0.1	3			
Sample ID: P09	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	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Note: 3
0.40 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Note: 6	
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	1.30	4.5	85	0.7	6.2	32	147	43	25	26	46	41	34	43	43	31	0.1	2			
Sample ID: K10	Recommendations:		Lime		Nutrients (lb/acre)												More Information				
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	Lime History:	1 - Corn, grain	0.3	120 - 160	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Note: 3
0.50 tons/acre; 3/2018	2 - Sweetpotato	0.0	60-90	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0.0	Note: 6		
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	1.30	2.7	70	0.8	5.6	186	47	43	18	31	105	80	80	108	108	109	0.1	4			

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Sample ID: K11		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		20		0				0		0		0		0																	
		2 - Sweetpotato		0.0		60-90		0		30		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	
0.46		1.36		3.6		76		0.8		5.9		185		62		48		20		26		158		112		112		116		116		124		0.1		3					
Sample ID: K12		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		20		0				0		0		0		0		0															
		2 - Sweetpotato		0.0		60-90		0		10		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	
0.32		1.36		3.0		84		0.5		6.2		135		68		50		23		29		120		86		86		80		80		105		0.1		3					
Sample ID: K13		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		0		0				0		0		0		0		0															
		2 - Sweetpotato		0.0		60-90		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	
0.56		1.38		4.7		86		0.6		6.4		194		80		58		20		28		161		108		108		95		95		91		0.1		2					
Sample ID: K14		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		10		0				0		0		0		0		0															
		2 - Sweetpotato		0.0		60-90		0		10		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	
0.41		1.34		3.7		85		0.6		6.3		188		71		55		20		29		131		91		91		82		82		94		0.1		3					

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Sample ID: K15		Recommendations:		Lime		Nutrients (lb/acre)										More Information									
						Crop		(tons/acre)		N		P2O5		K2O				Mg		S		Mn		Zn	
Lime History:		1 - Corn, grain		0.0		120 - 160		0		50		0		25		0		0		0		0		0	
		2 - Sweetpotato		0.0		60-90		0		70		0		25		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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N					
0.18	1.43	2.4	79	0.5	5.9	152	47	51	18	20	80	65	65	76	76	77	0.1	4							

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.

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 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

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
K2O	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
NO3-N	nitrate nitrogen
ORG	organic soil class
pH	current soil pH
P-I	phosphorus index
P2O5	phosphate
S-I	sulfur index
SS-I	soluble salt index
W/V	weight per volume
Zn-AI	zinc availability index
Zn-I	zinc index