



Internal

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: 11/01/2018 **Received:** 02/07/2019 **Completed:** 02/13/2019 **Farm:** Resstation

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 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	0	80	0	25	0	0	0	0	Note: 6 Note: 3
	2 - Corn, grain	0.0	120 - 160	0	20	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.32	1.38	3.2	72	0.9	5.8	236	67	47	15	21	107	74	81	111	111	84	0.1	3		

Sample ID: A02	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	0	60	0	25	0	0	0	0	Note: 6 Note: 3
	2 - Corn, grain	0.0	120 - 160	0	0	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.18	1.35	2.9	75	0.7	5.8	149	79	44	17	25	84	60	67	77	77	71	0.1	3		

Sample ID: A03	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 - Vegetables, other	0.0	80-100	0	80	0	20	0	0	0	0	Note: 6 Note: 3
	2 - Soybean	0.0	0	0	20	0	20	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	NO ₃ -N
0.22	1.29	3.3	81	0.6	6.1	189	65	49	22	21	92	63	63	97	97	68	0.1	3		



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

NCDA&CS Agronomic Division				Phone: (919) 733-2655				Website: www.ncagr.gov/agronomi/				Report No.				FY19-SL023894																									
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Sample ID: A04		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Sweetpotato		0.3		60-90		0		60		0		25				0		0		0.5																			
		2 - Soybean		0.0		0		0		40		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	
0.18		1.32		2.7		72		0.8		5.7		203		50		46		17		19		89		70		63		89		89		59		0.1		4					
Sample ID: A05		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Vegetables, other		0.5		80-100		0		110		0		25				0		0		0																			
		2 - Soybean		0.0		0		0		40		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	
0.22		1.36		2.7		66		0.9		5.4		221		49		44		13		18		102		71		71		98		98		65		0.1		4					
Sample ID: A06		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Vegetables, other		0.4		80-100		0		70		0		25				0		0		0																			
		2 - Corn, grain		0.0		120 - 160		0		10		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	
0.36		1.32		3.6		72		1.0		5.6		331		72		48		14		23		137		92		99		185		185		169		0.1		3					
Sample ID: A07		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Vegetables, other		0.0		80-100		0		100		0		25				0		0		0																			
		2 - Corn, grain		0.0		120 - 160		0		40		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	
0.13		1.38		2.4		73		0.6		5.7		190		54		46		16		18		75		55		62		135		135		97		0.1		4					

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Sample ID: A08		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn				Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		80		0		25		0				0		0	
		2 - Soybean		0.0		0		0		20		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			
0.13	1.31	2.8	73	0.8	5.8	138	65	41	20	18	65	49	49	117	117	54	0.1	4					
Sample ID: A9		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn				Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		70		0		25		0				0		0	
0.40 tons/acre; 3/2018		2 - Soybean		0.0		0		0		20		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			
0.18	1.32	2.9	71	0.8	5.7	137	69	40	18	19	68	51	51	73	73	59	0.1	3					
Sample ID: A10		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn				Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		140		0		25		0				0		0	
0.40 tons/acre; 3/2018		2 - Corn, grain		0.0		120 - 160		0		60		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			
0.27	1.44	3.0	76	0.7	5.9	273	39	51	18	18	114	78	85	128	128	91	0.1	3					
Sample ID: A11		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn				Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		160		0		25		0				0		0	
		2 - Corn, grain		0.0		120 - 160		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			
0.13	1.45	2.3	76	0.6	6.0	163	29	48	21	22	67	50	57	84	84	79	0.1	4					

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Sample ID: A12		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.4		80-100		0		120		0		25				0		0		0	
		2 - Corn, grain		0.0		120 - 160		0		50		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			
0.18	1.37	2.8	67	0.9	5.6	169	45	41	17	20	73	54	61	96	96	51	0.1	4					
Sample ID: S13		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		130		0		25				0		0		0	
0.40 tons/acre; 3/2018		2 - Soybean		0.0		0		0		50		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			
0.18	1.37	3.0	77	0.7	6.0	162	44	47	23	18	73	54	54	57	57	39	0.1	3					
Sample ID: B01		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3							
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
Lime History:		1 - Vegetables, other		0.0		80-100		0		180		0		25				0		0		0	
0.40 tons/acre; 3/2018		2 - Soybean		0.0		0		0		100		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			
0.27	1.45	2.8	77	0.6	5.9	207	22	57	16	24	88	63	63	216	216	105	0.1	4					
Sample ID: B02		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3							
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	
0.40 tons/acre; 3/2018		2 - Soybean		0.0		0		0		60		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			
0.13	1.43	2.1	66	0.7	5.4	157	38	44	13	32	62	47	47	98	98	109	0.1	5					

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Sample ID: B03		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		0		120		0		0		0				0		0		0																	
Lime History:		2 - Soybean		0.0		0		0		50		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]:																																									
HM%		W/V		CEC		BS%		Ac		pH		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		1.47		2.7		77		0.6		5.9		170		46		50		18		31		90		64		64		185		185		81		0.1		4					
Sample ID: B04		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3 Note: \$																							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																	
		1 - Vegetables, other		0.5		80-100		0		180		25		25		0				0		0		0																	
Lime History:		2 - Soybean		0.0		0		0		90		\$		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]:																																									
HM%		W/V		CEC		BS%		Ac		pH		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		2.0		62		0.8		5.2		126		24		44		12		18		67		50		50		123		123		66		0.1		5					
Sample ID: B05		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		60		160		0		0		0				0		0		0																	
Lime History:		2 - Soybean		0.0		0		0		80		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]:																																									
HM%		W/V		CEC		BS%		Ac		pH		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	
0.09		1.46		2.1		79		0.4		6.0		79		31		45		26		46		52		41		41		56		56		49		0.1		5					
Sample ID: B06		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		0		130		0		0		0				0		0		0																	
Lime History:		2 - Soybean		0.0		0		0		50		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]:																																									
HM%		W/V		CEC		BS%		Ac		pH		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		1.38		3.3		73		0.9		5.8		172		43		50		16		29		107		74		74		134		134		80		0.1		3					

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Sample ID: B07		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		Lime History:		1 - Vegetables, other		0.0		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	
0.36		1.43		3.2		73		0.9		5.8		141		28		49		19		14		47		38		38		50		50		35		0.1		3					
Sample ID: C01		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 18 Note: 18 Note: \$																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		Lime History:		1 - Blueberry, M		0.0		30-60		0		80		25				0		0		0		0																	
				2 - Blueberry, M		0.0		30-60		0		80		\$		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	
0.86		1.24		5.2		24		4.0		4.0		264		18		16		6		28		13						53		53		145		0.1		2					
Sample ID: E01		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
		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																			
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	
0.97		1.26		5.8		81		1.1		5.9		298		123		53		17		28		186		122		122		98		98		80		0.1		2					
Sample ID: E02		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 3																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		Lime History:		1 - Vegetables, other		0.0		80-100		0		50		0				25		0		0		0																	
				2 - Soybean		0.0		0		0		0		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		1.30		3.1		78		0.7		5.9		147		84		46		19		22		104		72		72		66		66		39		0.1		3					

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Sample ID: E03		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Sweetpotato		0.0		60-90		0		100		0		25		0				0		0		0.5	
Lime History:		2 - Corn, grain		0.0		120 - 160		0		60		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	1.36	2.8	76	0.7	5.9	182	37	49	20	18	111	84	84	82	82	52	0.1	4							
Sample ID: E04		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 18 Note: 18							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Grape, M		0.6		Note 18		0		100		0		25		0				0		0		0.5	
Lime History:		2 - Grape, M		0.0		Note 18		0		100		0		25		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					
0.22	1.35	3.3	65	1.2	5.3	223	26	43	18	20	50	47	47	205	205	72	0.1	3							
Sample ID: F01		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		20		0		25		0				0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		0		90		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	1.35	2.9	81	0.6	6.0	206	62	56	14	22	86	69	62	66	66	101	0.1	3							
Sample ID: F02		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 3							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Soybean		0.0		0		0		90		0		25		0				0		0		0	
Lime History:		2 - Corn, grain		0.0		120 - 160		0		90		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					
0.13	1.41	2.0	82	0.4	6.3	161	26	57	19	12	90	60	67	63	63	91	0.1	5							

Sample ID: F03	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 - Sweetpotato	0.0	60-90	0	120	0	25	0	0	0	0.5	Note: 6
	2 - Soybean	0.0	0	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
0.13	1.44	2.1	73	0.6	5.7	122	31	48	18	17	69	58	51	63	63	108	0.1	5		

Sample ID: F04	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 - Sweetpotato	0.0	60-90	0	160	0	25	0	0	0	0.5	Note: 6
	2 - Vegetables, other	0.0	80-100	0	180	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
0.13	1.43	2.0	70	0.6	5.6	182	22	52	13	16	99	76	69	114	114	208	0.1	5		

Sample ID: F05	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 - Sweetpotato	0.0	60-90	0	170	25	25	0	0	0	0.5	Note: 6
	2 - Vegetables, other	0.0	80-100	0	190	\$	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
0.13	1.42	1.9	70	0.6	5.6	150	19	52	13	15	119	88	81	63	63	57	0.1	5		

Sample ID: F07	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	50	0	25	0	0	0	0	Note: 3
	2 - Soybean	0.0	0	0	50	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	1.42	1.9	81	0.4	6.1	135	46	48	21	14	75	61	54	65	65	75	0.1	5		

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Sample ID: F08		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 6																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Sweetpotato		0.0		60-90		0		100		0		25				0		0		0		0.5																	
		2 - Vegetables, other		0.0		80-100		10		140		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	
0.13		1.37		1.9		75		0.5		5.9		115		38		48		17		17		63		55		48		59		59		62		0.1		5					
Sample ID: F09		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 6																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Sweetpotato		0.0		60-90		0		0		0		25				0		0		0		0.5																	
		2 - Vegetables, other		0.0		80-100		20		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	
0.27		1.33		3.3		77		0.8		5.8		107		84		47		17		22		101		78		71		64		64		88		0.1		3					
Sample ID: F10		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 6																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Sweetpotato		0.3		60-90		0		10		0		0				0		0		0		0.5																	
		2 - Vegetables, other		0.0		80-100		0		70		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		1.34		3.5		76		0.8		5.7		233		71		54		12		35		123		91		84		82		82		65		0.1		3					
Sample ID: F11		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6 Note: 6																									
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B																			
Lime History:		1 - Sweetpotato		0.0		60-90		0		60		0		25				0		0		0		0.5																	
		2 - Vegetables, other		0.0		80-100		0		110		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		1.45		2.1		77		0.5		5.9		174		50		52		13		25		75		62		55		107		107		41		0.1		5					

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Sample ID: G01		Recommendations:		Lime		Nutrients (lb/acre)										More Information									
						Crop		(tons/acre)		N		P2O5		K2O				Mg		S		Mn		Zn	
Lime History:		1 - Vegetables, other		0.3		80-100		0		70		0		25		0		0		0		0		Note: 6	
		2 - Corn, grain		0.0		120 - 160		0		10		0		25		0		0		0		0		Note: 3	
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					
0.51	1.35	3.9	73	1.0	5.7	203	70	50	14	24	163	108	115	138	138	94	0.1	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 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