



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: **Received:** 02/07/2019 **Completed:** 02/12/2019 **Farm:** Resstation

Sample ID: K16	Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6						
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.0	80-100	100	30	0	25	0	0	0	0										
Lime History:	2 - Sweetpotato		0.0	60-90	30	0	0	25	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.32	1.37	3.1	86	0.4	6.4	54	96	45	26	22	53	36	43	42	42	56	0.1	3			
Sample ID: K17	Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6						
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.0	80-100	40	30	0	25	0	0	0	0										
Lime History:	2 - Sweetpotato		0.0	60-90	0	0	0	25	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.22	1.35	3.7	88	0.4	6.5	87	96	48	27	23	67	43	50	47	47	63	0.1	3			
Sample ID: K18	Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 6						
	Crop	(tons/acre)	N	P2O5	K2O	Mg	S	Mn	Zn	Cu	B										
	1 - Vegetables, other	0.0	80-100	60	60	0	25	0	0	0	0										
Lime History:	2 - Sweetpotato		0.0	60-90	0	0	0	25	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-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO3-N	
0.32	1.38	3.9	84	0.6	6.3	75	79	48	26	25	68	46	53	38	38	67	0.1	3			

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Page 2 of 10																							
Sample ID: K20		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 - Vegetables, other		0.0		80-100		0		70		0		0				0		0		0	
		2 - Sweetpotato		0.0		60-90		0		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			
0.27	1.35	3.0	72	0.8	5.8	202	71	45	16	27	94	66	73	78	78	117	0.1	3					
Sample ID: K21		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 - Vegetables, other		0.0		80-100		30		40		0		0				0		0		0	
0.30 tons/acre; 3/2018		2 - Sweetpotato		0.0		60-90		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			
0.18	1.33	3.3	84	0.5	6.2	95	87	47	23	27	65	47	54	48	48	51	0.1	3					
Sample ID: K22		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 - Vegetables, other		0.0		80-100		0		110		0		25				0		0		0	
0.30 tons/acre; 3/2018		2 - Sweetpotato		0.0		60-90		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			
0.36	1.41	3.1	86	0.4	6.3	206	53	54	23	25	103	67	74	82	82	68	0.1	3					
Sample ID: K23		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 - Vegetables, other		0.0		80-100		0		110		0		0				0		0		0	
		2 - Sweetpotato		0.0		60-90		0		60		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			
0.36	1.40	2.9	78	0.6	5.8	186	52	50	18	26	99	69	76	87	87	89	0.1	3					

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Page 3 of 10																							
Sample ID: K24		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 - Vegetables, other		0.0		80-100		0		90		0		25				0		0		0	
		2 - Sweetpotato		0.0		60-90		0		30		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	2.5	79	0.5	5.9	128	60	46	21	22	68	51	58	60	60	80	0.1	4					
Sample ID: K25		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 - Vegetables, other		0.0		80-100		150		20		0		25				0		0		0	
		2 - Sweetpotato		0.0		60-90		80		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-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO3-N			
0.09	1.30	3.4	75	0.8	5.9	33	102	38	22	22	39	33	40	33	33	48	0.1	3					
Sample ID: K26		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 - Vegetables, other		0.0		80-100		0		0		0		0				0		0		0	
		2 - Sweetpotato		0.0		60-90		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			
0.92	1.30	6.2	83	1.1	6.1	137	130	51	21	37	136	90	97	93	93	101	0.1	2					
Sample ID: K27		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 - Vegetables, other		0.0		80-100		30		50		0		0				0		0		0	
0.30 tons/acre; 3/2018		2 - Sweetpotato		0.0		60-90		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	1.37	4.5	83	0.8	6.2	97	85	50	24	31	102	68	75	49	49	73	0.2	4					

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Page 4 of 10																																									
Sample ID: R01		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 3 Note: 6																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Soybean		0.0		0		30		0		0		0				0		0		0		0																	
Lime History: 0.30 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		110		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	
0.60		1.28		6.1		84		1.0		6.1		50		155		50		21		38		74		52		52		68		68		82		0.2		3					
Sample ID: R03		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 3 Note: 6																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Soybean		0.4		0		0		0		0		0				0		0		0		0																	
Lime History:		2 - Vegetables, other		0.0		80-100		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	
0.51		1.29		4.9		75		1.2		5.7		82		152		45		15		36		70		52		52		81		81		63		0.2		4					
Sample ID: R05		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 3 Note: 6																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Soybean		0.0		0		50		0		0		0				0		0		0		0																	
Lime History:		2 - Vegetables, other		0.0		80-100		150		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	
0.66		1.29		4.9		78		1.1		5.9		36		132		45		19		63		64		48		48		89		89		34		0.3		6					
Sample ID: R06		Recommendations:		Lime		Nutrients (lb/acre)										More Information Note: 3 Note: 6																									
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S				Mn		Zn		Cu		B																	
		1 - Soybean		0.0		0		0		0		0		0				0		0		0		0																	
Lime History: 0.50 tons/acre; 3/2018		2 - Vegetables, other		0.0		80-100		70		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	
0.36		1.29		4.6		77		1.1		5.8		70		134		42		20		39		62		47		47		61		61		55		0.2		4					

Sample ID: R08	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 - Soybean	0.0	0	0	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	60	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	1.32	4.7	83	0.8	6.1	76	143	47	21	37	62	46	46	48	48	44	0.2	4		

Sample ID: R09	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 - Soybean	0.0	0	0	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	60	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
1.08	1.24	7.6	87	1.0	6.2	74	142	55	23	61	42	32	32	47	47	54	0.1	1		

Sample ID: R10	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 - Soybean	0.0	0	0	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	80	20	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	1.33	4.7	79	1.0	5.9	63	108	50	18	34	63	48	48	58	58	35	0.2	4		

Sample ID: R11	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 - Soybean	0.6	0	40	0	0	0	0	0	0	0	Note: 3 Note: 6
	2 - Vegetables, other	0.0	80-100	130	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	1.27	4.9	72	1.4	5.6	41	129	42	17	38	49	39	39	54	54	40	0.2	4		

Sample ID: R12	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)								More Information
			N	P2O5	K2O	Mg	S	Mn	Zn	Cu	
Lime History:	1 - Soybean	0.0	0	10	0	0	0	0	0	0	Note: 3
	2 - Vegetables, other	0.0	80-100	90	0	0	0	0	0	0	Note: 6

Test Results [units - 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	1.30	5.5	83	0.9	6.1	60	120	53	19	38	48	38	38	44	44	59	0.2	4		

Sample ID: R13	Recommendations:	Lime (tons/acre)	Nutrients (lb/acre)								More Information
			N	P2O5	K2O	Mg	S	Mn	Zn	Cu	
Lime History:	1 - Soybean	0.0	0	0	0	0	0	0	0	0	Note: 3
	2 - Vegetables, other	0.0	80-100	20	0	0	0	0	0	0	Note: 6

Test Results [units - 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	1.29	7.6	89	0.8	6.5	104	130	56	25	52	71	45	45	109	109	69	0.3	4		

Sample ID: R14	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)								More Information
			N	P2O5	K2O	Mg	S	Mn	Zn	Cu	
Lime History:	1 - Soybean	0.0	0	0	0	0	0	0	0	0	Note: 3
	2 - Vegetables, other	0.0	80-100	30	0	0	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm ³ ; CEC and Na in meq/100 cm ³ ; NO ₃ -N in mg/dm ³]:											Soil Class: Mineral									
HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.60	1.31	5.0	80	1.0	6.0	100	120	52	16	45	71	53	53	72	72	52	0.3	6		

Sample ID: R15	Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre)								More Information
			N	P2O5	K2O	Mg	S	Mn	Zn	Cu	
Lime History: 0.60 tons/acre; 3/2018	1 - Cucumber	0.0	80-140	60	0	0	0	0	0	0	Note: 6
	2 - Soybean	0.0	0	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
0.76	1.27	4.9	82	0.9	6.0	74	122	48	22	40	36	31	31	42	42	43	0.2	4		

NCDA&CS Agronomic Division				Phone: (919) 733-2655				Website: www.ncagr.gov/agronomi/								Report No.				FY19-SL023898					
Page 7 of 10																									
Sample ID: R16		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 3							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Cucumber		0.0		80-140		30		20		0		0		0				0		0		0	
Lime History:		2 - Soybean		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					
0.97	1.29	5.2	81	1.0	6.0	102	108	50	20	41	52	41	41	65	65	48	0.3	6							
Sample ID: R17		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 6							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Vegetables, other		0.5		80-100		0		0		0		0		0				0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		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					
1.31	1.31	5.4	75	1.4	5.7	130	146	46	15	37	69	51	51	42	42	47	0.2	4							
Sample ID: R18		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 6							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Vegetables, other		0.0		80-100		0		0		0		0		0				0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		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					
1.31	1.29	7.0	86	1.0	6.1	133	161	55	20	57	82	57	57	51	51	52	0.3	4							
Sample ID: R19		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 6 Note: 6							
		Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn				Zn		Cu		B	
		1 - Cucumber		0.3		80-140		20		0		0		0		0				0		0		0	
Lime History:		2 - Vegetables, other		0.0		80-100		10		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					
2.76	1.30	8.3	78	1.8	5.9	117	128	50	20	50	60	46	46	85	85	58	0.2	2							

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Page 8 of 10																							
Sample ID: R20		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 - Cucumber		0.0		80-140		10		0		0		0		0				0		0	
		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			
2.22	1.26	7.5	80	1.5	5.9	123	141	51	20	35	51	41	41	66	66	50	0.2	3					
Sample ID: R21		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 - Vegetables, other		0.0		80-100		0		0		0		0		0				0		0	
		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			
2.01	1.29	7.5	82	1.3	6.1	126	133	54	20	41	70	51	51	103	103	61	0.2	3					
Sample ID: R22		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 - Vegetables, other		0.0		80-100		20		10		0		0		0				0		0	
		2 - Vegetables, other		0.0		80-100		20		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			
1.25	1.26	6.0	83	1.0	6.0	108	116	53	19	38	66	50	50	78	78	54	0.2	3					
Sample ID: S01		Recommendations:		Lime		Nutrients (lb/acre)												More Information Note: 3 Note: 6					
Crop		(tons/acre)		N		P2O5		K2O		Mg		S		Mn		Zn				Cu		B	
Lime History:		1 - Soybean		0.0		0		0		0		0		0		0				2		0	
		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			
1.08	1.25	5.9	78	1.3	5.9	87	98	49	21	41	36	32	32	70	70	24	0.2	3					

Sample ID: S02	Recommendations:	Lime	Nutrients (lb/acre)									More Information	
	Crop	(tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B		
	Lime History:	1 - Sweetpotato	0.0	60-90	0	0	0	0	0	\$	0.5	Note: 6 Note: \$	Note: 3
		2 - Soybean	0.0	0	0	0	0	0	0	2	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
1.14	1.25	7.4	84	1.2	6.1	68	104	53	24	49	37	38	31	139	139	22	0.2	3		

Sample ID: S03	Recommendations:	Lime	Nutrients (lb/acre)									More Information	
	Crop	(tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B		
	Lime History:	1 - Sweetpotato	0.0	60-90	0	0	0	0	0	0	0.5	Note: 6	Note: 3
		2 - Soybean	0.0	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	1.21	8.4	89	0.9	6.4	90	108	60	22	41	66	50	43	102	102	28	0.2	2		

Sample ID: S04	Recommendations:	Lime	Nutrients (lb/acre)									More Information	
	Crop	(tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B		
	Lime History:	1 - Soybean	0.0	0	0	0	0	0	0	0	0	Note: 3	Note: 6
	1.60 tons/acre; 3/2018	2 - Vegetables, other	0.0	80-100	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
1.55	1.14	7.9	80	1.6	6.0	64	120	48	25	50	37	32	32	104	104	29	0.2	3		

Sample ID: S05	Recommendations:	Lime	Nutrients (lb/acre)									More Information	
	Crop	(tons/acre)	N	P ₂ O ₅	K ₂ O	Mg	S	Mn	Zn	Cu	B		
	Lime History:	1 - Soybean	0.3	0	0	0	0	0	0	2	0	Note: 3	Note: 6
		2 - Vegetables, other	0.0	80-100	20	10	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
2.01	1.14	8.8	79	1.8	5.9	101	116	50	23	44	41	35	35	113	113	19	0.2	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 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